

# REQUIREMENTS for the BACHELOR'S DEGREE

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By WALTON C. JOHN

A Thesis submitted to the Faculty of Graduate Studies  
of George Washington University in 1918, in part  
satisfaction of the requirements for the degree  
of Doctor of Philosophy.

WASHINGTON, D. C.  
1920



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DEPARTMENT OF THE INTERIOR  
BUREAU OF EDUCATION

BULLETIN, 1920, No. 7

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By

WALTON C. JOHN



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## LETTER OF TRANSMITTAL.

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DEPARTMENT OF THE INTERIOR,  
BUREAU OF EDUCATION,  
*Washington, D. C., October 16, 1919.*

SIR: The liberal arts curricula in the colleges and the universities of the United States have undergone significant changes in recent years. To some extent, these changes have been accentuated by the recent war. At the same time greater attention has been given to the relationships between secondary schools and higher institutions, particularly with respect to college entrance requirements.

In order to facilitate the work of college educators and administrators in formulating curricula leading to the cultural bachelors' degrees, and in making readjustments in college entrance requirements when necessary, I recommend the publication of the bulletin entitled "Requirements for the Bachelor's Degree," by Dr. Walton C. John, Specialist in charge of Land-Grant College Statistics in the Bureau of Education.

Respectfully submitted.

P. P. CLAXTON,  
*Commissioner.*

The SECRETARY OF THE INTERIOR.



# REQUIREMENTS FOR THE BACHELOR'S DEGREE.

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## INTRODUCTION.

The following study is based on the analysis of the requirements for the bachelor's degree of 101 universities and colleges in the United States, including Hawaii and Porto Rico. The first chapter contains a brief résumé of the history of entrance and college graduation requirements for the bachelor's degree with special reference to the subjects required and the order of their appearance in the curricula.

*Data and method.*—The fundamental data have been gathered from the university and college catalogues for the year 1916-17. The catalogue requirements were summarized on preliminary tables. From these summaries have been prepared a series of graphic tables which describe the entrance and the college graduation requirements of each institution; each type of cultural bachelor's degree has been considered. Appendix B shows in graphic form the different entrance and graduation requirements each, for four years, in terms of units, semester hours, and the corresponding percentages of the prescribed and elective subjects. The percentages of the prescribed and elective subjects are considered from the standpoint of eight years also. The study of these graphs makes possible a rapid comparison of the salient features of the various bachelor's degrees of the same institution or of different institutions.

The various tables and graphs scattered throughout the text are founded on the graphs in Appendix B.

Physical training and military drill are not included in the comparative tables or graphs as relatively few institutions of our list give college credit in these subjects.

*Method of treating the averages.*—The tables which give the average requirements for the prescribed subjects are especially designed to show the tendencies for each degree. The general average which is found at the bottom of the table is not an average of the averages but a true average. Thus it is possible to make accurate comparisons between the tendencies of different degrees and the general average. The negative instances are not counted in the averages of the prescribed subjects, as the result would give a number difficult of direct comparison with individual standards in any given subject.

*The problem.*—It is the purpose of this study to show the characteristic tendencies of both entrance and graduation requirements in the 101 universities and colleges which compose our list. An attempt has been made to point out the relations of all the prescribed requirements to the entire period of eight years.

The second, third, and fourth chapters contain summaries and conclusions based upon the general discussion. The fourth chapter emphasizes the importance of considering the bachelor's degree course from the standpoint of a single unit of seven or eight years, the general argument bearing on this question being considered in the closing section on the unification of the bachelor's degree course.

*List of universities and colleges included in this study.*

(a) STATE UNIVERSITIES AND COLLEGES.

- |   |  |
|---|--|
| 1. University of Alabama, Tuscaloosa.                                   | 29. University of Nevada, Reno.                    |
| 2. University of Arizona, Tucson.                                       | 30. University of North Carolina, Chapel Hill.     |
| 3. University of Arkansas, Fayetteville.                                | 31. University of North Dakota, University.        |
| 4. University of California, Berkeley.                                  | 32. Ohio State University, Columbus.               |
| 5. University of Colorado, Boulder.                                     | 33. Ohio University, Athens.                       |
| 6. Delaware College, Newark.  | 34. Miami University, Oxford, Ohio.                |
| 7. Howard University, Washington, D.C.                                  | 35. University of Oklahoma, Norman.                |
| 8. University of Florida, Gainesville.                                  | 36. University of Oregon, Eugene.                  |
| 9. University of Georgia, Athens.                                       | 37. Pennsylvania State College, State College.     |
| 10. College of Hawaii, Honolulu.  | 38. University of Porto Rico, San Juan.            |
| 11. University of Idaho, Moscow.  | 39. University of South Carolina, Columbia.        |
| 12. University of Illinois, Urbana.                                     | 40. University of South Dakota, Vermillion.        |
| 13. Indiana University, Bloomington.                                    | 41. University of Tennessee, Knoxville.            |
| 14. State University of Iowa, Iowa City.                                | 42. University of Texas, Austin.                   |
| 15. University of Kansas, Lawrence.                                     | 43. University of Utah, Logan.                     |
| 16. University of Kentucky, Lexington.                                  | 44. University of Vermont, Burlington.             |
| 17. Louisiana State University, Baton Rouge.                            | 45. University of Virginia, Charlottesville.       |
| 18. University of Maine, Orono.   | 46. College of William and Mary, Williamsburg, Va. |
| 19. University of Michigan, Ann Arbor.                                  | 47. University of Washington, Seattle.             |
| 20. University of Minnesota, Minneapolis.                               | 48. State College of Washington, Pullman.          |
| 21. University of Mississippi, University.                              | 49. West Virginia University, Morgantown.          |
| 22. University of Missouri, Columbia.                                   | 50. University of Wisconsin, Madison.              |
| 23. University of Montana, Missoula.                                    | 51. University of Wyoming, Laramie.                |
| 24. University of Nebraska, Lincoln.                                    |  |
| 25. New Hampshire College of Agriculture and the Mechanic Arts, Durham. |  |
| 26. Rutgers College, New Brunswick, N. J.                               |  |
| 27. University of New Mexico, Albuquerque.                              |  |
| 28. Cornell University, Ithaca, N. Y. <sup>1</sup>                      |  |

<sup>1</sup> Cornell University, although supported by private as well as Federal and State funds, has been chosen to represent New York State.



## (b) ENDOWED UNIVERSITIES AND COLLEGES.

1. Amherst College, Amherst, Mass.
2. Baker University, Baldwin City, Kans.
3. Beloit College, Beloit, Wis.
4. Bowdoin College, Brunswick, Me.
5. Brown University, Providence, R. I.
6. Bryn Mawr College, Bryn Mawr, Pa.
7. Carleton College, Northfield, Minn.
8. Catholic University of America, Washington, D. C.
9. University of Chicago, Chicago, Ill.
10. Colgate University, Hamilton, N. Y.
11. Colorado College, Colorado Springs, Colo.
12. Columbia University, New York, N. Y.
13. Dartmouth College, Hanover, N. H.
14. De Pauw University, Greencastle, Ind.
15. Earlham College, Earlham, Ind.
16. George Washington University, Washington, D. C.
17. Goucher College, Baltimore, Md.
18. Grinnell College, Grinnell, Iowa.
19. Hamilton College, Clinton, N. Y.
20. Harvard University, Cambridge, Mass.
21. Haverford College, Haverford, Pa.
22. Johns Hopkins University, Baltimore, Md.
23. Lafayette College, Easton, Pa.
24. Leland Stanford Jr. University, Stanford University, Calif.
25. Muhlenberg College, Allentown, Pa.
26. New York University, New York, N. Y.
27. Northwestern University, Evanston, Ill.
28. Oberlin College, Oberlin, Ohio.
29. University of Pennsylvania, Philadelphia, Pa.
30. University of Pittsburgh, Pittsburgh, Pa.
31. Princeton University, Princeton, N. J.
32. Randolph-Macon College, Ashland, Va.
33. Smith College, Northampton, Mass.
34. University of the South, Sewanee, Tenn.
35. Swarthmore College, Swarthmore, Pa.
36. Syracuse University, Syracuse, N. Y.
37. Trinity College, Durham, N. C.
38. Tufts College, Tufts College, Mass.
39. Tulane University of Louisiana, New Orleans.
40. Union University, Schenectady, N. Y.
41. Vanderbilt University, Nashville, Tenn.
42. Vassar College, Poughkeepsie, N. Y.
43. Washington University, St. Louis, Mo.
44. Washington and Lee University, Lexington, Va.
45. Wellesley College, Wellesley, Mass.
46. Wells College, Aurora, N. Y.
47. Wesleyan University, Middletown, Conn.
48. Western Reserve University, Cleveland, Ohio.
49. Williams College, Williamstown, Mass.
50. Yale University, New Haven, Conn.



## Chapter I.

### A BRIEF HISTORICAL SKETCH OF ENTRANCE AND COLLEGE REQUIREMENTS FOR THE BACHELOR'S DEGREE IN THE UNITED STATES.

---

#### (a) COLLEGE ENTRANCE REQUIREMENTS.

##### COLONIAL PERIOD.

*Latin and Greek.*—The history of college entrance requirements in the United States begins in 1642, when Harvard College published the following announcement:

When any scholar is able to read Tully or such like classical Latin Author extempore, and make and speak true Latin in verse and prose (suo (ut aiunt) Marte), without any assistance whatever and decline perfectly the paradigms of nouns and verbs in ye Greek tongue, then may hee bee admitted into ye College, nor shall any claim admission before such qualifications.

The foregoing is a translation from the Latin of a part of the college statutes.

In the College of William and Mary, Latin and Greek were the only subjects required for entrance at the beginning of its career in 1693, although no definite statement of the requirements is given.

As early as 1720, Yale College made the following announcement:

Such as are admitted Students into ye Collegiate School shall in their examination in order thereunto be found expert in both ye Latine and Greek grammars, as also skilful in construing and grammatically resolving both Latine and Greek authors and in making good and true latin.

As time progressed some difficulty was found at Harvard in keeping up that part of the requirement which obliged the candidates to speak Latin. In 1734 this obstacle was removed, and in 1790 the word "translate" was substituted for the word "construe." Yale followed suit in 1795.

*Arithmetic.*—In 1745, Yale College added common arithmetic to the entrance requirements. At the same time the moral character of the candidates was not overlooked, as is shown by the following: "And shall bring sufficient testimony of his blameless and inoffensive life."

Princeton, in 1746, based the entrance standards on the same grounds as those of Harvard and Yale, but did not include arithmetic until 1760. This subject, however, seems to have dropped out until 1813 when the student was supposed to know the subject as far as the rule of three.

Columbia College, which began as King's College in 1754, prescribed Latin, Greek, and arithmetic for entrance. Both Brown and Williams had essentially the same requirements.

*Entrance examinations (oral).*—During the colonial period most students prepared for college at the Latin-grammar schools which were closely related to the colleges. The examinations were oral and not so strict as might have been expected.

#### THE NINETEENTH CENTURY.

*Geography.*—In 1807, geography and arithmetic were added to the usual requirements at Harvard College, and there is evidence of greater care in stating the terms of admission. The amount of work in each subject was more clearly indicated. Neither was quality overlooked when we find within small compass such expressions as these: "Thoroughly acquainted with the grammar of the Greek;" "properly construe and parse," etc.; "be well instructed in the following rules of arithmetic;" "have well studied a compendium of geography." Geography found a place as an entrance requirement before 1830 in Princeton, Columbia, Yale, and other colleges.

*English grammar.*—The next preparatory subject introduced was English grammar. Princeton led out with this subject in 1819, being followed by Yale in 1822, Columbia in 1860, and by Harvard in 1866.

*Algebra and geometry.*—Harvard was the first college to extend the entrance requirement in mathematics beyond arithmetic. In 1820 elementary algebra was added as far as geometrical progressions. Algebra was prescribed for entrance by Columbia in 1821, by Yale in 1847, and by Princeton in 1848. In 1844 Harvard added geometry and additional topics in algebra. Between 1856 and 1870 geometry was added to the entrance requirements by Yale, Princeton, Michigan, and Columbia.

*History; physical geography.*—History was required for entrance by Harvard and Michigan in 1847; by Cornell in 1868. Physical geography was found in the requirements for Harvard and Michigan in 1870.

#### THE MODERN PERIOD.

*Modern languages.*—Harvard College was the first to make French an entrance requirement for the regular college course, although in the early part of the nineteenth century Columbia College had recognized this language as a prerequisite to its courses in science. By 1875, both French and German had equal recognition as entrance subjects at Harvard. Yale added French in 1885, Columbia in 1891, Princeton in 1893, and Cornell in 1897.

*English composition and rhetoric.*—English composition was included in the entrance requirements of Princeton in 1870. The

colleges next to add this subject were Harvard in 1874, Michigan in 1878, Columbia and Cornell in 1882, and Yale in 1894. Rhetoric had been required by the University of Michigan from 1874 to 1878, while Princeton added the latter subject in 1884.

*Sciences.*—Although Harvard and Michigan had already introduced physical geography in 1870, Syracuse University was the first to prescribe natural philosophy. Natural science was added to the requirements by Harvard in 1876, Cornell followed with physiology in 1877, and Michigan included natural science and botany in 1890.

It is apparent that the order of importance of prescribed entrance subjects has been completely reversed in recent years. Until a few years ago Latin and Greek had always occupied first place, but since 1885 English has gained the ascendancy. Starting out with simple grammar the subject has been developed so as to include composition, rhetoric, and a broad range of study in the best of both English and American literatures. Latin and Greek still have a place in college entrance requirements, but they are seldom required unless it be in combination with modern languages. The present tendency is to consider all languages under one general group; the privilege is then given to the student to make suitable electives in harmony with the specific purpose of the college course.

Mathematics is the only entrance subject that in the long run of years has maintained its place. Next to English it appears most frequently on the list of prescribed subjects.

Science and history are well established, although they are considered as electives by nearly one-half of the institutions of our list.

The most recent development is the growing recognition of a large group of vocational subjects which command within certain limits equal credit with the literary subjects.

## (b) COLLEGE GRADUATION REQUIREMENTS.

### COLONIAL PERIOD.

The establishment of Harvard College on the banks of the Charles in 1636 is the outstanding event in the history of higher education in the United States. As the mother of American colleges and universities, Harvard College has been inseparably connected with the developments of collegiate education that have taken place during the past three centuries. Compared with the present standards of graduation the following requirements, taken from the laws of Dunster (1642), seem very simple indeed:

Every scholar that on proof is found able to translate the original of the Old and New Testament into the Latin tongue, and to resolve them logically, and shall be imbued with the beginnings of natural and moral philosophy, withal being of honest life and conversation, and at any public act hath the approbation of the overseers and master of

the college, may be invested with his first degree; but no one will expect this degree unless he shall have passed four years in college and has maintained therein a blameless life and has sedulously observed all public exercises.

The first year shall teach rhetoric, second and third year dialectics, and the fourth year shall add philosophy \* \* \*. In this course of four years each one shall dispute twice in his public schools and shall respond twice in his own class; which if he performs, and is found worthy after the regular examination, he shall become an A. B.<sup>1</sup>

William and Mary College was founded in 1693, at Williamsburg, Va., by James Blair, who modeled the curriculum somewhat on the plan of the University of Edinburgh. The principal subjects of study were the classics, Hebrew, philosophy, arithmetic, geography, and anatomy. Yale was established at New Haven, Conn., in 1701. The subjects prescribed for the A. B. degree at that institution were the classics including Tully and Vergil, also logic, physics, Greek, New Testament, and Hebrew. Disputations were held two or three times a week.

Princeton College received its charter in 1745 and closely followed the programs of Harvard and Yale. The University of Pennsylvania was a direct offshoot from the College, Academy, and Charitable School of Philadelphia. Franklin was the father of this school and he bore testimony in his early day to the uselessness of Latin and Greek in the educational requirements of the schools. To him foreign languages were but the tools of knowledge, and if the vernacular gave all necessary information, other tools were needless. The course of study at the Philadelphia school was unusually strong in science, and contrary to the desires of the founder, it was equally strong in the classics.

Columbia University, founded as King's College in 1754, enlarged the college curriculum and laid the foundation for a very broad course of study. The following summary of college requirements announced by the president in the year 1754 is of special interest:

The college aims to instruct and perfect—

In the learned languages;

In the art of reasoning correctly;

In writing correctly and speaking eloquently;

In the arts of numbering and measuring;

In surveying and navigation;

In geography and history;

In husbandry, commerce, and government;

In knowledge of all nature in the heavens above us and in the air, water, and earth around us and the various kinds of meteors, stones, mines, and minerals, plants, and animals;

In everything useful for the comfort, the convenience, and elegance of life in the chief manufactures.

To lead them [pupils] from the study of nature to the knowledge of themselves and of the God of nature, and their duty to Him, themselves, and one another;

And everything that can contribute to their true happiness, both here and hereafter.<sup>2</sup>

<sup>1</sup> Administration of the College Curriculum, by Foster, p. 11.

<sup>2</sup> History of Education in the United States, Dexter.



## THE REVOLUTIONARY PERIOD, AND FRENCH INFLUENCES (1780 TO 1840).

About the time of the Revolutionary War when the influences which gave birth to the Nation were at their height in this country, several important State-supported colleges were founded. These reflected to a considerable extent the French practices of organization, especially in the States of New York, Georgia, Michigan, Wisconsin, Louisiana, California, and Maryland.

The colleges were, in most instances, the centers of the several State systems of education. To a certain extent the elective system, as we now understand it, was attributed to French influences. Jefferson in reorganizing education in Virginia showed the result of his contact with the newer ideas which have made a lasting impression on higher education in this country. The curriculum of the University of Virginia, as adopted in 1824, is, doubtless, next to the founding of Harvard College, the most significant event in the history of American college education.

George Ticknor, who was called to the chair of languages at Harvard College in 1817, urged radical changes in the administration of the curriculum on accepting his post, and he sponsored not only the elective system but urged the organization of departments with separate heads.

About the middle of the nineteenth century President Wayland, of Brown University, was successful in broadening the scope of the college curriculum. He stood also for a better quality of instruction. Meanwhile the sciences, chemistry in particular, were finding a permanent place in college requirements, having appeared first at Yale and Harvard shortly after the year 1800. Mathematics was being developed under the influence of the great French mathematicians. Political economy was first taught at Harvard in 1820, and Yale, Columbia, Dartmouth, Princeton, and Williams all added this subject within 15 years. The first chair of history was founded by William and Mary in 1822 and Harvard followed suit in 1839.

While French had been a side issue in some of the colleges, Bowdoin established a chair of modern languages, under H. W. Longfellow, in 1825. In the same year German was added to the course at Harvard. It was also taught at the University of Virginia.

## THE CIVIL WAR.

The Civil War gave a setback to several of the old State institutions which had arisen under the national movement. But at the same time a very important movement in higher education was launched by Senator Morrill, of Vermont, who was father of the principal enabling acts of the land-grant colleges.<sup>1</sup> These colleges

<sup>1</sup> Jonathan B. Turner, of Jacksonville, Ill., also took an active part in the development of this legislation.

were not only to give a liberal education in the arts and sciences, but were especially devoted to developing agricultural and engineering education of a high order. The States were not slow in complying with the conditions of the Morrill and subsequent acts, so to-day we find 68 land-grant colleges in successful operation all over the United States.

#### GERMAN INFLUENCE.

The influence of the German universities on a small group of prominent American thinkers and educators before the outbreak of the Civil War led to the further development of the principle of freedom of election of college studies. President Eliot, of Harvard, in the year 1869, led out in this movement which has with little resistance spread over the United States. Some reaction to extreme views on this question has been manifest, the present tendency being to safeguard the student's work by a more restricted plan of election which will insure the most profitable combination of studies.

## Chapter II.

### COLLEGE ENTRANCE REQUIREMENTS.

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#### DEFINITION AND FUNCTION.

College entrance requirements cover conditions of age, physical fitness, moral integrity, and intellectual attainment.

In our list, 24 State schools (45 per cent) and 8 of the endowed schools (16 per cent) specify the minimum age limits for entrance as follows:

STATE INSTITUTIONS: *Fifteen years*—University of Alabama; *sixteen years*—University of Arizona, University of California, University of Colorado, Delaware College, University of Florida, University of Idaho, University of Illinois, State University of Iowa, Louisiana State University and Agricultural and Mechanical College, University of Maine, University of Michigan, University of Mississippi, University of Montana, Rutgers College (N. J.), Cornell University (N. Y.), University of Oklahoma, University of South Carolina, University of Tennessee, University of Texas, University of Virginia, College of William and Mary (Va.), University of Vermont and State Agricultural College, West Virginia University.

ENDOWED INSTITUTIONS: *Fifteen years*—Randolph-Macon College (Va.); *sixteen years*—Colgate University (N. Y.), Leland Stanford Junior University (Calif.), University of the South (Tenn.), Vanderbilt University (Tenn.), Union University (N. Y.), Tulane University of Louisiana; *seventeen years*—Catholic University of America (D. C.).

Certificates of moral character or honorable dismissal are, according to the catalogues, required by 23 State (44.9 per cent) and 29 endowed institutions (58 per cent).

Approximately one-half of the institutions neither specify the age limits for entrance nor require any formal statement respecting the moral integrity of the entrant. This may be explained by the fact that the majority of students come from accredited high schools. Graduation from these schools implies that the age and moral character of the student are satisfactory until shown to the contrary. A century ago there was evidently more reason for publishing these requirements than to-day, as most of the candidates for college were much younger and were looking forward to the ministry as a profession.

The physical condition of the student is inquired into by a number of institutions. Arizona and California definitely require a physical examination for entrance, also Columbia, Goucher, Leland Stanford, Smith, Wellesley, and Wells. The question of physical exami-

nation, however, is generally considered a part of the prescribed college work in physical training rather than of entrance requirements.<sup>1</sup>

The University of Arizona requires that—

All new students at the time of registration shall submit a statement signed by a reputable physician, certifying to the good health or to such disability as will in any way affect the student's university work or his membership in the university.<sup>2</sup>

The University of California states that "Applicants must also appear before the university medical examiners and pass a satisfactory physical examination, to the end that the health of the university community may be safeguarded."<sup>3</sup>

The study of the statistics of the infirmary of the University of California shows the scope of the medical examinations of entrants, both men and women. It is evident that these examinations are of great importance both to the student and to the university. (See Appendix A, p. 249.)

The University of Texas requires a certificate of vaccination for entrance. "Each applicant for admission must present a certificate, signed by a physician, that he has had smallpox or has been successfully vaccinated."<sup>4</sup>

Goucher College requires "a physician's certificate that their health is not such as to interfere with their college work."<sup>5</sup>

Leland Stanford University announces that—

Every student upon entering the university is required to report for a brief examination. General health and vaccination are the important factors in the examination. Any condition which may place a limitation on the amount or kind of work planned by the student may be discussed with him or made the subject of a report to his major department or to the committee on registration.

Within three weeks after the day of registration every student must file with the committee on public health a certificate, signed by the vaccinator, who must be a duly licensed and practicing physician, giving exact dates of vaccination, and showing either successful vaccination within seven years, or unsuccessful vaccination twice within the past twelve months.

Noncompliance with these requirements will result in a fine of \$2 after three weeks, and an additional fine of \$4 after five weeks, and cancellation of registration after seven weeks from the day of registration.<sup>6</sup>

Smith College says:

All candidates are expected to present satisfactory testimonials regarding their moral character and *physical fitness* for a college course. The college reserves the right at any time to cancel the registration of a student who in maturity of character or in physical strength seems unequal to the demands of college life.<sup>7</sup>

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<sup>1</sup> See Appendix A for the discussion of requirements in physical training.

<sup>2</sup> University of Arizona Record, 1915-16, p. 49.

<sup>3</sup> University of Calif. Bull., Academic Depts., August, 1916, p. 53.

<sup>4</sup> University of Texas Catalogue, 1915-16, Mar. 1, 1916, p. 49.

<sup>5</sup> Goucher College Bulletin, April, 1916, p. 31.

<sup>6</sup> Leland Stanford Register, 1915-16, p. 79.

<sup>7</sup> Smith College Catalogue, 1916-17, p. 18.

Columbia College, in addition to other requirements, demands that "a certificate of health must be presented."<sup>1</sup>

Wellesley College makes the following requirement:

A statement from the applicant's physician to the effect that she is organically sound and in good health, together with a certificate of successful vaccination within five years, must be filed with the board of admission before June 1 of the year in which admission is sought. No candidate can be regarded as finally accepted until she has been given a thorough physical examination by the college medical staff. The college reserves the right to reject any candidate if the results of this examination, in the opinion of the medical staff, justify such action; or to accept the candidate only on the understanding that she will take five years to complete the course.<sup>2</sup>

A report of the physical director states that before this ruling was made—

there were at least 50 girls in the entering class of 450 who were in very bad condition—a number of serious cases of heart disease among them. After the requirement was made the number was materially lessened.

If the physician's certificate states conditions that are suspicious, we take the matter up and may prevent a girl from coming.<sup>3</sup>

In Wells College "a medical examination blank is sent to each new student. It must be filled out by the family physician and presented by the student herself to the director of physical education directly after entering college."<sup>4</sup>

### INTELLECTUAL REQUIREMENTS.

The intellectual prescriptions are usually satisfied by the completion of a recognized course of secondary school subjects. Many institutions further satisfy themselves as to the quality as well as the quantity of work done by the candidate, in order to eliminate those who will not receive benefit or be of benefit to the college.

### METHOD OF ENTRANCE.

The means of satisfying the entrance requirements on the academic side announced by the schools in our list are as follows:

1. Examination of the student in all the specified entrance subjects at the college or university itself.
2. Examination in the specified entrance requirements elsewhere than the college or university, under the direction of an approved examining board such as the college entrance examination board, and the New York State Board of Regents.
3. The presentation of certificates from properly accredited secondary schools, such as are approved or accredited by the North Central Association of Colleges and Secondary Schools and other similar accrediting organizations.

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<sup>1</sup> Columbia College Announcement, 1916-17, p. 10.

<sup>2</sup> Wellesley College Bulletin, 1916-17, p. 27.

<sup>3</sup> Record Aids in College Management by Allen, p. 10.

<sup>4</sup> Wells College Bulletin, 1916-17 p. 75.

4. Part certification and part examination.
5. Presentation of diploma from a standard normal school.
6. Presentation of diploma from an approved high school.
7. Presentation of a State teacher's certificate of the proper grade.
8. Comprehensive examinations. "The essential feature of the plan is that it combines the certificate and examination methods of admission. The candidate presents a certificate from the secondary school testifying to the quantity of work covered. The college takes a sample of the quality by examining him in four subjects. The examination is designed to test the candidate's general knowledge of a given subject and his intellectual power, not to ascertain whether he has mastered a prescribed book or course."<sup>1</sup>

9. Under special circumstances an entrant of sufficient age and experience may be allowed to do regular college work on probation. If successful, he may be allowed to graduate. Harvard University permits such students to proceed in the regular college studies but instead of giving the degree of bachelor of arts, grants the special degree of associate in arts. Such graduates may, if properly prepared, obtain the master's degree in one year.

With the exception of Leland Stanford, which announces that no examinations for entrance are conducted at the university, all the schools on our list conduct entrance examinations of their own.

Only 10 State schools announce that they accept the examinations of the college entrance examination board: California, Colorado, Illinois, Iowa, Maine, Minnesota, Rutgers, Ohio State, Pennsylvania State College, and Vermont; but the endowed schools take much greater advantage of these examinations, there being only 15 institutions which do not announce them. These schools are as follows: Beloit, Baker, Carleton, Colorado, De Pauw, Earlham, Grinnell, Muhlenburg, Oberlin, Randolph-Macon, Trinity, Tulane, Vanderbilt, Washington (St Louis), and Washington and Lee.

Six State schools and 16 endowed schools announce that they accept, subject to certain limitations, the certificates of the New York State Board of Regents. They are Georgia, Illinois, Cornell, New York, Rutgers, and Ohio State; and Amherst, Brown, Colgate, Columbia, Dartmouth, Hamilton, New York, Pennsylvania, Smith, Syracuse, Tufts, Union, Vassar, Wells, Wesleyan, and Williams.

The certificates of accredited, approved, or commissioned secondary schools are accepted by all institutions, both State and endowed, with the exception of Bryn Mawr, Columbia, Harvard, Haverford, and Yale.

Iowa, Haverford, and Tufts announce the plan of part certification and part examination.

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<sup>1</sup>Report of the Commissioner of Education, 1916, p. 130.



Taking the catalogues of 1916-17 as a basis, no State institution has announced the adoption of the "comprehensive plan of examination," but 10 endowed schools have made provision for this type of entrance examination. These institutions are Columbia, Goucher, Harvard, Haverford, Princeton, Smith, Vassar, Wellesley, Wells, and Yale.

Nine State schools accept the graduates of standard normal schools, either from within or without the State. The schools accepting appropriate normal school diplomas for entrance, including advanced standing, are: Arizona, California, Georgia, Illinois, Minnesota, Missouri, Ohio State, Texas, Wisconsin, and Wyoming.

The acceptance of the diplomas of approved normal schools is not mentioned by the endowed colleges, with the exception of Teachers College, George Washington University.

Three State institutions, California, Indiana, and Louisiana, admit certain students on the presentation of an appropriate State certificate; the only endowed school offering this plan is De Pauw University.

#### THE ENTRANCE UNIT.

The following definition of a "unit" is subscribed to by both the State institutions and the endowed institutions under discussion:

A unit represents a year's study in any subject in a secondary school, constituting approximately a quarter of a full year's work.

This statement is designed to afford a standard of measurement for the work done in secondary schools. It takes the four-year high school course as a basis and assumes that the length of the school year is from 36 to 40 weeks, that a period is from 40 to 60 minutes in length, and that the study is pursued for four or five periods a week; but under ordinary circumstances, a satisfactory year's work can not be accomplished in less than 120 sixty-minute hours or their equivalent. Schools organized on a different basis can nevertheless estimate their work in terms of this unit.<sup>1</sup>

Two hours of manual training or laboratory work are generally assumed to be equivalent to one hour of classroom work.<sup>1</sup>

Two institutions, Indiana and DePauw Universities, recognize a year of 32 weeks. De Pauw gives extra credit for the year of 36 weeks.

*Other names and values of the "unit."*—The following terms—"credit," "semester unit," and "point,"—are used by several State institutions instead of unit to signify the basic term of entrance credit.

1. In the University of Arizona a credit is equivalent to the standard unit as defined above.

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<sup>1</sup> College Entrance Requirements, by Clarence D. Kingsley. Bulletin, United States Bureau of Education, 1913.

2. In the University of California unit is used, but is equivalent to only one-third of the standard unit.

3. In Rutgers College a point means the same as "unit."

4. In the University of Nebraska a point is equivalent to a half unit.

5. In the State College of Washington a credit means a half unit.

Four endowed schools—Amherst, Bryn Mawr, Muhlenburg, and Wellesley—use point instead of unit. In each case a point is equivalent to the standard unit.

### CONDITIONAL ENTRANCE.

The following summary shows how conditional entrance is treated by the institutions in question:

#### SUMMARY.

STATE INSTITUTIONS: *Fifteen units required, 1 unit conditioned*—Colorado, Idaho, Iowa, North Dakota, Miami, Oklahoma, Washington State College, and Wyoming; *14 units required, 2 units conditioned*—Alabama, Arkansas, Delaware, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Texas, Virginia, William and Mary; *15 units required, 2 units conditioned*—Arizona, Howard, Iowa, Kentucky, Michigan, Montana, Nebraska, Rutgers, New Mexico, Ohio State, Utah, and West Virginia; *16 units required, 2 units conditioned*—Florida, Georgia; *schools which permit conditions but do not definitely state the number*—California, Indiana, Kansas, Minnesota, Missouri, Nevada, Oregon, and Vermont; *schools which definitely prohibit conditioned entrance*—Illinois.

ENDOWED INSTITUTIONS: *Fourteen units required, 1 unit conditioned*—Trinity College; *14½ units required, 1 unit conditioned*—Hamilton; *15 units required, 1 unit conditioned*—Baker, Colorado College, Grinnell, Northwestern, Oberlin, Syracuse, Washington (St. Louis); *14 units required, 2 units conditioned*—Randolph-Macon, University of the South, Vanderbilt; *15 units required, 2 units conditioned*—Pittsburg, Tulane, Washington and Lee; *14 units required, 2½ units conditioned*—Amherst; *14½ units required, 2½ units conditioned*—Dartmouth; *15 units required, 3 units conditioned*—Wellesley; *20 units required, 5 units conditioned*—Bryn Mawr; *schools which permit conditions but do not definitely state the number*—Columbia, Harvard, Haverford, Princeton, Western Reserve; *schools which definitely prohibit conditional entrance*—Chicago, Leland Stanford.

According to the summary it is evident that 2 units is the more common allowance for conditioned entrance. The lowest entrance requirements, if conditions are accepted, are found at Amherst, 14—2½, or 11½ units; Dartmouth, 14½—2½, or 12 units; also a large group of institutions of the South—Alabama, Mississippi, South Carolina, Tennessee, Texas, Virginia, William and Mary, Randolph-Macon, University of the South, Vanderbilt, besides Delaware and Wellesley—reduce their entrance requirements to 12 units by means of conditions. The practice of giving conditional admittance on 10 units no longer exists in any school contained in our list

**ALLOWANCE FOR QUALITY IN ENTRANCE REQUIREMENTS.**

Colgate University, which normally requires 15 units for admission, provides that "an average of 85 per cent or more during the preparatory course may count as 1 unit, making only 14 units required."<sup>1</sup>

**ALLOWANCE FOR QUANTITY IN ENTRANCE REQUIREMENTS.**

De Pauw University<sup>2</sup> announces that 16 units of admission is based on a minimum of a unit of 32 weeks to a school year. If a preparatory school offers a unit of 36 weeks, 1 unit of the 16 required is dropped from the electives.

**TYPES OF ENTRANCE UNITS (PRESCRIBED).**

The prescribed units may be classified as follows: (a) Specific course; (b) subject (course unspecified); (c) degree group, core group.

The specific course type of unit is represented by any single prescribed subject, as English composition or algebra. These subjects usually admit of no substitutions within the groups to which they belong.

The subject requirement may be represented by foreign language, science, or social science. Here the group idea is more dominant than any specific course within the group. First-year Spanish may be equivalent to first-year French or to first-year Latin as a prescribed unit in foreign language. American history, ancient history, civics, and even elementary economics may be options in the group subject called social science.

By the degree group is meant a group of subjects prescribed for entrance to a course leading to a specific degree. Thus, the University of Arizona<sup>3</sup> requires for entrance to the A. B. curriculum 3 units each of English, mathematics, and Latin, but for entrance to the B. S. curriculum 3 units each of only English and mathematics. In Delaware College<sup>4</sup> the entrance group for the A. B. includes with other subjects Greek or Latin and a modern language, but in the B. S. group Greek and Latin are omitted.

The core group is essentially the same as the degree group, but all core groups prepare for a single degree, or for the corresponding college core group requirements of a single degree. For example, in Trinity College the group which leads to course A of the college requirement includes English, Latin, and Greek, history, and mathematics, while the group leading to course B permits the substitution of Latin by French and German. There is also a greater freedom of election in the entrance group leading to course B.

<sup>1</sup> Catalogue of Colgate University, 1916-17.

<sup>3</sup> Catalogue of the University of Arizona, 1916-17.

<sup>2</sup> Catalogue of De Pauw University, 1916-17.

<sup>4</sup> Catalogue of Delaware College, 1916-17.

## THE PRESCRIBED ENTRANCE SUBJECTS—NUMBER AND NAMES.

The institutions under discussion prescribe, in general, six subjects or group subjects, namely, English, foreign language, mathematics science, social science (history, civics, etc.), and industries. The latter subject is required for entrance by the University of Porto Rico only, leaving five subjects and their groups to show the scope of prescribed work in the United States proper.

The following summaries and observations, based upon the maximum and minimum tables, give the number of units prescribed in each subject according to the type of bachelor's degree sought. The percentage of time required for each subject compared with the total number of entrance units prescribed is also given.

TABLE 1.—*Entrance requirements in English for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in English.	Percent required in English.
1	University of California.....	15	2	13.33
2	University of Nebraska.....	15	2	13.33
3	University of Wisconsin.....	14	2	14.28
4	University of Florida.....	16	3	18.75
5	Indiana University.....	16	3	18.75
6	University of Porto Rico.....	16	3	18.75
7	University of Arizona.....	15	3	20.00
8	University of Colorado.....	15	3	20.00
9	Howard University (D. C.).....	15	3	20.00
10	University of Idaho.....	15	3	20.00
11	University of Illinois.....	15	3	20.00
12	State University of Iowa.....	15	3	20.00
13	University of Kansas.....	15	3	20.00
14	University of Kentucky.....	15	3	20.00
15	University of Michigan.....	15	3	20.00
16	University of Minnesota.....	15	3	20.00
17	University of Missouri.....	15	3	20.00
18	Rutgers College (N. J.).....	15	3	20.00
19	University of New Mexico.....	15	3	20.00
20	Cornell University (N. Y.).....	15	3	20.00
21	University of Nevada.....	15	3	20.00
22	University of North Dakota.....	15	3	20.00
23	Ohio State University.....	15	3	20.00
24	Ohio University.....	15	3	20.00
25	Miami University (Ohio).....	15	3	20.00
26	University of Oklahoma.....	15	3	20.00
27	University of Oregon.....	15	3	20.00
28	University of South Dakota.....	15	3	20.00
29	University of Utah.....	15	3	20.00
30	University of Washington.....	15	3	20.00
31	State College of Washington.....	15	3	20.00
32	West Virginia University.....	15	3	20.00
33	University of Wyoming.....	15	3	20.00
34	University of Vermont.....	14½	3	20.70
35	University of Maine.....	14½	3	20.70
36	University of Alabama.....	14	3	21.42
37	University of Arkansas.....	14	3	21.42
38	Delaware College.....	14	3	21.42
39	University of Georgia.....	14	3	21.42
40	Louisiana State University.....	14	3	21.42
41	University of Mississippi.....	14	3	21.42
42	University of North Carolina.....	14	3	21.42
43	Pennsylvania State College.....	14	3	21.42
44	University of South Carolina.....	14	3	21.42
45	University of Tennessee.....	14	3	21.42
46	University of Texas.....	14	3	21.42
47	University of Virginia.....	14	3	21.42
48	College of William and Mary.....	14	3	21.42
49	University of Montana.....	15	4	26.66

TABLE 1.—*Entrance requirements in English for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in English.	Percent required in English.
1	Catholic University of America (school of philosophy).....	19½	3	15.39
2	Catholic University of America (school of sciences).....	18½	3	16.20
3	Yale University.....	17	3	17.64
4	Harvard University.....	16½	3	18.18
5	Princeton University.....	16½	3	18.18
6	Catholic University of America (school of letters).....	16	3	18.75
7	De Pauw University.....	16	3	18.75
8	Baker University.....	15	3	20.00
9	Beloit College.....	15	3	20.00
10	Carleton College.....	15	3	20.00
11	University of Chicago.....	15	3	20.00
12	Colgate University.....	15	3	20.00
13	Columbia University.....	15	3	20.00
14	Colorado College.....	15	3	20.00
15	Earlham College.....	15	3	20.00
16	George Washington University.....	15	3	20.00
17	Goucher College.....	15	3	20.00
18	Grinnell College.....	15	3	20.00
19	Leland Stanford University.....	15	3	20.00
20	Muhlenburg College.....	15	3	20.00
21	New York University.....	15	3	20.00
22	Northwestern University.....	15	3	20.00
23	Oberlin College.....	15	3	20.00
24	University of Pittsburgh.....	15	3	20.00
25	Syracuse University.....	15	3	20.00
26	Trinity College, N. C.....	15	3	20.00
27	Tufts College.....	15	3	20.00
28	Tulane University.....	15	3	20.00
29	Vanderbilt University.....	15	3	20.00
30	Vassar College.....	15	3	20.00
31	Washington University (St. Louis).....	15	3	20.00
32	Washington and Lee University.....	15	3	20.00
33	Wellesley College.....	15	3	20.00
34	Western Reserve University.....	15	3	20.00
35	Brown University.....	14½	3	20.70
36	Dartmouth College.....	14½	3	20.70
37	Hamilton College.....	14½	3	20.70
38	Haverford College.....	14½	3	20.70
39	University of Pennsylvania.....	14½	3	20.70
40	Bowdoin College.....	14½	3	20.70
41	Johns Hopkins University.....	14½	3	20.70
42	Lafayette College.....	14½	3	20.70
43	Smith College.....	14½	3	20.70
44	Swarthmore College.....	14½	3	20.70
45	Wells College.....	14½	3	20.70
46	Wesleyan University.....	14½	3	20.70
47	Williams College.....	14½	3	20.70
48	Amherst College.....	14	3	21.42
49	Randolph-Macon College.....	14	3	21.42
50	University of the South.....	14	3	21.42
51	Union University.....	14	3	21.42
52	Bryn Mawr College.....	20	4	20.00

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nebraska.....	15	2	13.33
2	University of Florida.....	16	3	18.75
3	University of Porto Rico.....	16	3	18.75
4	University of Arizona.....	15	3	20.00
5	Howard University (D. C.).....	15	3	20.00
6	College of Hawaii.....	15	3	20.00
7	University of Idaho.....	15	3	20.00
8	University of Illinois.....	15	3	20.00
9	University of Kentucky.....	15	3	20.00
10	New Hampshire College.....	15	3	20.00
11	Rutgers College (N. J.).....	15	3	20.00
12	University of Nevada.....	15	3	20.00
13	University of North Dakota.....	15	3	20.00
14	State College of Washington.....	15	3	20.00
15	University of Vermont.....	14½	3	20.70
16	University of Arkansas.....	14	3	21.42
17	University of Mississippi.....	14	3	21.42
18	University of South Carolina.....	14	3	21.42
19	University of Virginia.....	14	3	21.42
20	College of William and Mary.....	14	3	21.42
21	University of Alabama.....	14	3	21.42
22	Delaware State College.....	14	3	21.42

TABLE 1.—*Entrance requirements in English for the bachelor's degree—Continued.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in English.	Percent required in English.
1	Princeton University.....	16 $\frac{1}{2}$	3	18.18
2	Harvard University.....	16 $\frac{1}{2}$	3	18.18
3	Beloit College.....	15	3	20.00
4	Carleton College.....	15	3	20.00
5	Colgate University.....	15	3	20.00
6	University of Chicago.....	15	3	20.00
7	Columbia University.....	15	3	20.00
8	Earlham College.....	15	3	20.00
9	Grinnell College.....	15	3	20.00
10	Muhlenberg College.....	15	3	20.00
11	New York University.....	15	3	20.00
12	Northwestern University.....	15	3	20.00
13	University of Pittsburgh.....	15	3	20.00
14	Syracuse University.....	15	3	20.00
15	Tufts College.....	15	3	20.00
16	Tulane University.....	15	3	20.00
17	Vanderbilt University.....	15	3	20.00
18	Dartmouth College.....	14 $\frac{1}{2}$	3	20.70
19	Hamilton College.....	14 $\frac{1}{2}$	3	20.70
20	Haverford College.....	14 $\frac{1}{2}$	3	20.70
21	Bowdoin College.....	14 $\frac{1}{2}$	3	20.70
22	Catholic University of America.....	14 $\frac{1}{2}$	3	20.70
23	Lafayette College.....	14 $\frac{1}{2}$	3	20.70
24	Wesleyan University.....	14 $\frac{1}{2}$	3	20.70
25	Randolph-Macon College.....	14	3	21.42
26	University of the South.....	14	3	21.42
27	Union University.....	14	3	21.42

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of Nebraska.....	15	2	13.33
2	University of Florida.....	16	3	18.75
3	University of Colorado.....	15	3	20.00
4	Howard University (D. C.).....	15	3	20.00
5	University of Idaho.....	15	3	20.00
6	State University of Iowa.....	15	3	20.00
7	University of Kansas.....	15	3	20.00
8	University of Michigan.....	15	3	20.00
9	University of Minnesota.....	15	3	20.00
10	University of Missouri.....	15	3	20.00
11	University of New Mexico.....	15	3	20.00
12	University of Nevada.....	15	3	20.00
13	University of North Dakota.....	15	3	20.00
14	Ohio State University.....	15	3	20.00
15	Miami University (Ohio).....	15	3	20.00
16	University of Oregon.....	15	3	20.00
17	University of Oklahoma.....	15	3	20.00
18	University of Utah.....	15	3	20.00
19	University of Washington.....	15	3	20.00
20	University of Wyoming.....	15	3	20.00
21	University of Vermont.....	14 $\frac{1}{2}$	3	20.70
22	University of Arkansas.....	14	3	21.42
23	University of Georgia.....	14	3	21.42
24	Louisiana State University.....	14	3	21.42
25	University of Mississippi.....	14	3	21.42
26	University of North Carolina.....	14	3	21.42
27	University of South Carolina.....	14	3	21.42
28	University of Tennessee.....	14	3	21.42
29	University of Texas.....	14	3	21.42
30	University of Alabama.....	14	3	21.42

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	George Washington University.....	15	3	20.00
2	Tulane University.....	15	3	20.00
3	University of Pittsburgh.....	15	3	20.00
4	Johns Hopkins University and Goucher College.....	15	3	20.00
5	University of Chicago.....	15	3	20.00
6	Columbia University.....	15	3	20.00



TABLE 1.—*Entrance requirements in English for the bachelor's degree*—Continued.

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

	Institution.	Total entrance units required.	Units required in English.	Per cent required in English.
1	University of Vermont (for Ph. B.).....	14½	3	20.70
1	Rutgers College (N. J.) (for Litt. B.).....	15	3	20.00

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES.

1	Catholic University of America (for Ph. B.).....	19½	3	15.39
2	Muhlenberg College (for Ph. B.).....	15	3	20.00
3	Hamilton College (for Ph. B.).....	14½	3	20.70
4	Lafayette College (for Ph. B.).....	14½	3	20.70
5	Union University (for Ph. B.).....	14	3	21.42
6	University of Chicago (for Ph. B.).....	15	3	20.00
7	Princeton University (for Litt. B.).....	16½	3	18.18
1	Brown University (for Ph. B.).....	14½	3	20.70

## THE PRESCRIBED COLLEGE ENTRANCE SUBJECTS.

## ENGLISH.

According to Table 1, English is required for entrance by all the institutions included in the discussion for each type of bachelor's degree. With few exceptions, the standard is 3 units.

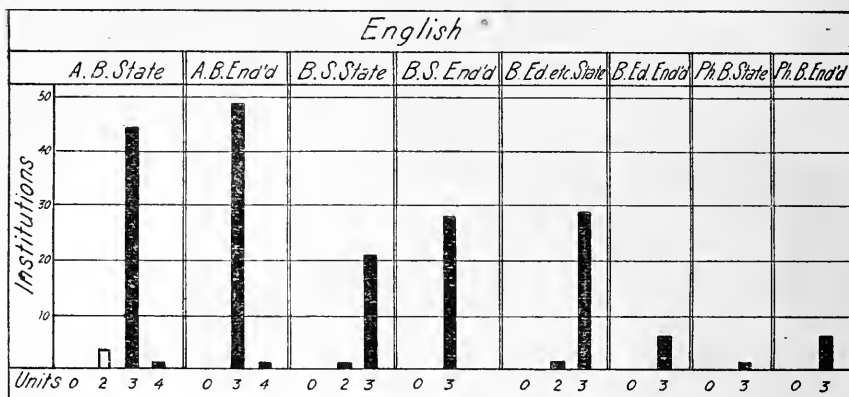
TABLE 2.—*English*.<sup>1</sup>

(Units.)

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	2	4	2.95	20.94	3	20.00	3	18.7 to 21.4
A. B. (endowed).....	3	4	3.01	19.95	3	20.00	3	15.4 to 20
B. S. (State).....	2	3	2.95	20.06	3	20.00	3	13.3 to 21.4
B. S. (endowed).....	3	3	2.66	20.23	3	20.00	3	18.1 to 21.4
B. Ed. (State).....	2	3	2.99	20.18	3	20.00	3	18.7 to 21.4
B. Ed. (endowed).....	3	3	3.00	20.00	3	20.00	3	20.00
Ph. B. (State).....	(3)	(3)	(3.00)	(20.70)	(3)	(20.70)	(3)	(20.00)
Ph. B. (endowed).....	3	3	3.00	19.81	3	20.70	3	15.4 to 20
Litt. B. (State).....	(3)	(3)	(3.00)	(20.70)	(3)	(20.70)	3	(20.70)
Litt. B. (endowed).....	(3)	(3)	(3.00)	(18.18)	(3)	(18.18)	3	(18.18)
General average.....			2.83	20.07				

<sup>1</sup> Figures in parentheses indicate one institution only.

Table 2 shows the great uniformity of the standards in English for the different bachelor's degrees, and this is further shown by the following tabulation of the mode based on Graph 1:



GRAPH 1.

*The mode (3 units).*

ENGLISH.

Degree.	Number of schools.	Number of cases.
A. B. (State).....	45	49
A. B. (endowed).....	49	50
B. S. (State).....	21	23
B. S. (endowed).....	28	28
B. Ed. (State).....	29	30
B. Ed. (endowed).....	6	6
Ph. B. (State).....	1	1
Ph. B. (endowed).....	6	6
Litt. B. (State).....	1	1
Litt. B. (endowed).....	1	1
Total.....	187	195

In 187 out of 195 cases (95.8 per cent), 3 units in English are prescribed.

*Summary of frequencies—English.*

A. B. (STATE).

3 require 2 units—13.33 to 14.28 per cent.  
45 require 3 units—20 to 21.42 per cent.  
1 requires 4 units—26.66 per cent.

B. S. (STATE).

1 requires 2 units—13.33 per cent.  
21 requires 3 units—18.75 to 21.42 per cent.

B. ED. ETC. (STATE).

1 requires 2 units—13.33 per cent.  
29 require 3 units—18.75 to 21.42 per cent.

PH. B. (STATE).

1 requires 3 units—20.70 per cent.

LITT. B. (STATE).

1 requires 3 units—20 per cent.

A. B. (ENDOWED).

49 require 3 units—15.39 to 21.42 per cent.  
1 requires 4 units—20 per cent.

B. S. (ENDOWED).

28 require 3 units—18.8 to 21.43 per cent.

B. ED. ETC. (ENDOWED).

6 require 3 units—20 per cent.

PH. B. (ENDOWED).

6 require 3 units—15.39 to 18.18 per cent.

LITT. B. (ENDOWED).

1 requires 3 units—18.18 per cent.

TABLE 3.—*Entrance requirements in foreign language for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in foreign language.	Per cent required in foreign language.
1	State University of Nevada.....	15	0	0
2	University of North Dakota.....	15	0	0
3	University of South Dakota.....	15	0	0
4	State College of Washington.....	15	0	0
5	University of Utah.....	15	0	0
6	University of Mississippi.....	14	0	0
7	University of South Carolina.....	14	0	0
8	University of Florida.....	16	2	12.50
9	Indiana University.....	16	2	12.50
10	University of California.....	15	2	13.33
11	University of Idaho.....	15	2	13.33
12	University of Illinois.....	15	2	13.33
13	State University of Iowa.....	15	2	13.33
14	University of Kentucky.....	15	2	13.33
15	University of Michigan.....	15	2	13.33
16	University of Missouri.....	15	2	13.33
17	University of Montana.....	15	2	13.33
18	University of New Mexico.....	15	2	13.33
19	Miami University (Ohio).....	15	2	13.33
20	University of Oklahoma.....	15	2	13.33
21	University of Oregon.....	15	2	13.33
22	University of Washington.....	15	2	13.33
23	West Virginia University.....	15	2	13.33
24	University of Wyoming.....	15	2	13.33
25	University of Arizona.....	15	2	13.33
26	Louisiana State University.....	14	2	14.28
27	University of Porto Rico.....	16	3	18.75
28	University of Kansas.....	15	3	20
29	University of Nebraska.....	15	3	20
30	University of Arkansas.....	14	3	21.42
31	University of Texas.....	14	3	21.42
32	University of Alabama.....	14	3	21.42
33	College of William and Mary.....	14	3	21.42
34	University of California.....	15	4	26.66
35	University of Colorado.....	15	4	26.66
36	Howard University (D. C.).....	15	4	26.66
37	University of Minnesota.....	15	4	26.66
38	Ohio State University.....	15	4	26.66
39	Ohio University.....	15	4	26.66
40	University of Maine.....	14½	4	27.60
41	University of North Carolina (group 3).....	14	4	28.57
42	University of Pennsylvania.....	14	4	28.57
43	University of Tennessee.....	14	4	28.57
44	University of Virginia.....	14	4	28.57
45	Cornell University.....	15	5	33.33
46	University of Georgia.....	14	5	35.71
47	University of North Carolina (groups 1 and 2).....	14	5 <sup>7/10</sup>	40.71
48	Howard University (D. C.).....	15	6	40
49	University of Wisconsin.....	14	6	40.85
50	Delaware College.....	14	6	40.85
51	Rutgers College (N. J.).....	15	7	46.66
52	University of Vermont.....	14½	7	48.24

-FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	15	0	0
2	Leland Stanford University.....	15	0	0
3	University of Pittsburgh.....	15	0	0
4	Swarthmore College.....	14½	0	0
5	Beloit College.....	15	2	13.33
6	Carleton College.....	15	2	13.33
7	Earlham College.....	15	2	13.33
8	George Washington University.....	15	2	13.33
9	Tufts College.....	15	2	13.33
10	Washington and Lee University.....	15	2	13.33
11	De Pauw University.....	16	3	18.75
12	Baker University.....	15	3	20
13	Colgate University.....	15	3	20
14	Northwestern University.....	15	3	20
15	Tulane University.....	15	3	20
16	University of Pennsylvania.....	14½	3	20.70
17	Bowdoin College.....	14½	3	20.70
18	Wesleyan University.....	14½	3	20.70
19	Harvard University.....	16½	4	24.24
20	University of Chicago <sup>1</sup> .....	15	4	26.66
21	Colorado College.....	15	4	26.66
22	Columbia University.....	15	4	26.66
23	Grinnell College.....	15	4	26.66
24	Oberlin College.....	15	4	26.66

<sup>1</sup> Suggested requirement.

TABLE 3.—*Entrance requirements in foreign language for the bachelor's degree—Contd.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Units required in foreign language.	Per cent required in foreign language.
25	Trinity College.....	15	4	26.66
26	Wellesley College.....	15	4	26.66
27	Western Reserve University.....	15	4	26.66
28	Haverford College.....	14½	4	27.60
29	Smith College.....	14½	4	27.60
30	University of the South.....	14	4	28.57
31	Syracuse University.....	15	5	33.33
32	Washington University.....	15	5	33.33
33	Brown University.....	14½	5	34.45
34	Amherst College.....	14	5	35.70
35	New York University.....	15	6	40
36	Trinity College (N. C.).....	15	6	40
37	Vanderbilt University.....	15	6	40
38	Dartmouth College.....	14½	6	41.34
39	Hamilton College.....	14½	6	41.34
40	Wells College.....	14½	6	41.34
41	Randolph-Macon College.....	14	6	42.85
42	Union University.....	14	6	42.85
43	Princeton University.....	14½	7	48.24
44	Yale University.....	17	7	41.16
45	Vassar College.....	15	7	46.66
46	Lafayette College.....	14½	7	48.24
47	Williams College.....	14½	7	48.24
48	Johns Hopkins University.....	14½	7	48.24
49	Union University.....	14	7	50
50	Catholic University of America (school of sciences).....	18½	8	43.2
51	Muhlenberg College.....	15	8	53.33
52	Catholic University of America (school of philosophy).....	19½	9	46.17
53	Catholic University of America (school of letters).....	16	9	56.25
54	Bryn Mawr College.....	20	10	50

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Florida.....	16	2	12.50
2	University of Arizona.....	15	2	13.33
3	Howard University (D. C.).....	15	2	13.33
4	University of Idaho.....	15	2	13.33
5	University of Kentucky.....	15	2	13.33
6	University of Vermont.....	14½	2	13.78
7	Delaware College.....	14	2	14.28
8	College of William and Mary.....	14	2	14.28
9	University of Porto Rico.....	16	3	18.75
10	University of Nebraska.....	15	3	20
11	Rutgers College (N. J.).....	15	2	20
12	University of Virginia.....	14	4	28.57

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Beloit College.....	15	2	13.33
2	Carleton College.....	15	2	13.33
3	Earlham College.....	15	2	13.33
4	Grinnell College.....	15	2	13.33
5	Tufts College.....	15	2	13.33
6	Tulane University.....	15	2	13.33
7	Bowdoin College.....	14½	2	13.80
8	Lafayette College.....	14½	2	13.80
9	Wesleyan University.....	14½	2	13.80
10	Union University.....	14	2	14.28
11	Harvard University.....	16½	3	18.18
12	Colgate University.....	15	3	20
13	Muhlenberg College.....	15	3	20
14	New York University.....	15	3	20
15	Northwestern University.....	15	3	20
16	Dartmouth College.....	14½	3	20.67
17	Princeton University.....	14½	4	24.24
18	Syracuse University.....	15	4	26.66
19	Vanderbilt University.....	15	4	26.66
20	Haverford College.....	14½	4	27.60
21	Catholic University of America (school of sciences).....	14½	4	27.60
22	Randolph-Macon College.....	14	4	28.56
23	University of the South.....	14	4	28.56
24	Hamilton College.....	14½	5	34.45

TABLE 3.—*Entrance requirements in foreign language for the bachelor's degree—Contd.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

	Institution.	Total entrance units required.	Units required in foreign language.	Per cent required in foreign language.
1	University of Florida.....	16	2	12.50
2	University of Idaho.....	15	2	13.33
3	State University of Iowa.....	15	2	13.33
4	University of Michigan.....	15	2	13.33
5	University of Missouri.....	15	2	13.33
6	University of New Mexico.....	15	2	13.33
7	Miami University (Ohio).....	15	2	13.33
8	University of Oregon.....	15	2	13.33
9	University of Oklahoma.....	15	2	13.33
10	University of Washington.....	15	2	13.33
11	University of Wyoming.....	14	2	14.28
12	University of Georgia.....	14	2	14.28
13	Louisiana State University.....	15	3	20
14	University of Kansas.....	15	3	20
15	University of Nebraska.....	14	3	21.42
16	University of Texas.....	14	3	21.42
17	University of Alabama.....	14	3	21.42
18	University of Colorado.....	15	4	26.66
19	University of Minnesota.....	15	4	26.66
20	Ohio State University.....	14	4	28.57
21	University of Tennessee.....	14	4	28.57
22	University of North Carolina.....	14	5 $\frac{7}{10}$	40.71
23	Howard University (D. C.).....	15	6	40
24	University of Vermont.....	14 $\frac{1}{2}$	7	48.24

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	George Washington University.....	15	2	13.33
2	Tulane University.....	15	2	13.33
3	Johns Hopkins University and Goucher College.....	15	2	13.33

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	University of Vermont (for Ph. B.).....	14 $\frac{1}{2}$	6	41.34
1	Rutgers College (N. J.) (for Litt. B.).....	15	7	46.66

FOR PH. B. FROM NON-STATE UNIVERSITIES.

1	Brown University (for Ph. B.).....	14 $\frac{1}{2}$	3	20.70
2	Muhlenburg College (for Ph. B.).....	15	5	33.33
3	Hamilton College (for Ph. B.).....	14 $\frac{1}{2}$	5	34.45
4	Lafayette College (for Ph. B.).....	14 $\frac{1}{2}$	5	34.45
5	Union University (for Ph. B.).....	14	6	42.85
6	Catholic University of America (for Ph. B.).....	19 $\frac{1}{2}$	9	46.17

## FOREIGN LANGUAGE.

## (a) FOREIGN LANGUAGE IN GENERAL.

Next to English and mathematics foreign language is the most generally prescribed preparatory subject for the bachelor's degree. According to Table 3, 7 of the 49 State institutions under discussion—Nevada, North Dakota, South Dakota, Washington State College, Utah, Mississippi, South Carolina (third group); and 4 of the endowed group, Chicago, Leland Stanford, Pittsburgh, Swarthmore—do not prescribe language for entrance to the A. B. courses.

As to the other degrees foreign language is required for entrance by the following proportion of institutions: Twelve of the 23 State institutions granting the B. S. degree; 25 of the 28 endowed institutions granting the B. S. degree; 24 of the 30 State institutions granting bachelor's degrees in education; 3 of the 6 endowed institutions

granting bachelor's degrees in education; by the University of Vermont for the Ph. B. degree; by 5 out of the 6 endowed institutions granting the Ph. B. degree; by both State and endowed schools for the Litt. B. degree.

TABLE 4.—*Foreign language.*

(Units.)

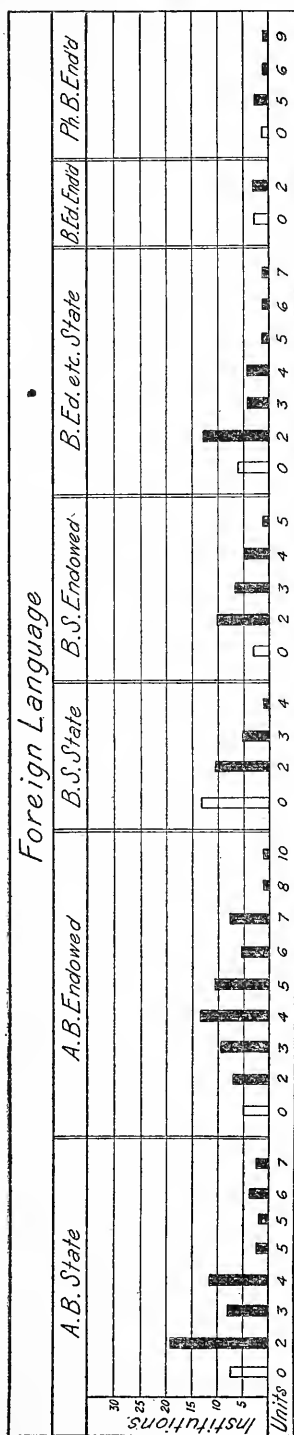
Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	2	7	3.35	22.27	3	21.42	2	12.5 to 42
A. B. (endowed).....	2	10	4.86	31.27	4	27.60	4	24.2 to 28.5
B. S. (State).....	2	4	2.41	16.29	2	13.78	2	12.5 to 14.2
B. S. (endowed).....	2	5	2.96	20.02	3	20.00	2	13.3 to 14.2
B. Ed. (State).....	2	7	3.04	20.40	2	14.28	2	12.5 to 14.2
B. Ed. (endowed).....	2	2	2.00	13.33	2	13.33	2	13.33
Ph. B. (State).....	(6)	(6)	(6.00)	(41.34)	(6)	(41.34)	(6)	(41.34)
Ph. B. (endowed).....	5	9	6.00	38.25	5	34.45	5	33.3 to 34.4
Litt. B. (State).....	(7)	(7)	(7.00)	(46.66)	(7)	(46.66)	(7)	(46.66)
Litt. B. (endowed).....	(4)	(4)	(4.00)	(24.24)	(4)	(24.24)	(4)	(46.66)
General average.....			3.73	23.90				

According to Table 4 the endowed schools require, on the average, about  $1\frac{1}{2}$  units more language than the State schools for the A. B. degree, which is about 10 per cent more with respect to the total entrance requirements. For the other degrees the relation is reversed, the State schools prescribing more language than the endowed.

Graph 2 clearly indicates the mode for foreign language, 2 units being the mode for the A. B. (State), B. S. (State), B. S. (endowed), and B. Ed. (State). Four units is the mode for the A. B. (endowed), although it is not very predominant.

*The mode.*

Degree.	Number of schools (2 units).	Number of schools (4 units).	Number of cases.
A. B. (State).....	19	11	49
A. B. (endowed).....	6	12	50
B. S. (State).....	8	1	22
B. S. (endowed).....	10	5	27
B. Ed. (State).....	13	4	30
B. Ed. (endowed).....	3		6
Ph. B. (State).....			1
Ph. B. (endowed).....			7
Litt. B. (State).....			1
Litt. B. (endowed).....		1	1
Total.....	59	34	194



GRAPH 2.

*Summary of frequencies—foreign language.*

## A. B. (STATE).

19 require 2 units—12.50 to 14.28 per cent.  
 7 require 3 units—18.75 to 21.42 per cent.  
 11 require 4 units—26.66 to 28.57 per cent.  
 2 require 5 units—33.33 to 35.70 per cent.  
 1 requires  $5\frac{7}{10}$  units—40.71 per cent.  
 3 require 6 units—40 to 40.85 per cent.  
 2 require 7 units—46.66 to 48.23 per cent.

## B. S. (STATE).

8 require 2 units—12.50 to 14.28 per cent.  
 3 require 3 units—18.75 to 20 per cent.  
 1 requires 4 units—28.75 per cent.

## B. ED., ETC. (STATE).

13 require 2 units—12.50 to 14.28 per cent.  
 4 require 3 units—20 to 21.42 per cent.  
 4 require 4 units—26.66 to 28.57 per cent.  
 1 requires  $5\frac{7}{10}$  units—40.71 per cent.  
 1 requires 6 units—40 per cent.  
 1 requires 7 units—48.23 per cent.

## PH. B. (STATE).

1 requires 6 units—41.34 per cent.

## LITT. B. (STATE).

1 requires 7 units—46.66 per cent.

## A. B. (ENDOWED).

6 require 2 units—13.33 per cent.  
 8 require 3 units—18.75 to 20.70 per cent.  
 12 require 4 units—24.24 to 28.57 per cent.  
 9 require 5 units—33.33 to 35.70 per cent.  
 6 require 7 units—41.16 to 50 per cent.  
 1 requires 8 units—43.2 to 53.33 per cent.<sup>1</sup>  
 1 requires 10 units—50 per cent.

## B. S. (ENDOWED).

10 require 2 units—13.33 to 14.28 per cent.  
 7 require 3 units—19.35 to 20.67 per cent.  
 5 require 4 units—24.24 to 28.56 per cent.  
 1 requires 5 units—34.45 per cent.

## B. ED., ETC. (ENDOWED).

3 require 2 units—13.33 per cent.

## PH. B. (ENDOWED).

3 require 5 units—33.33 to 34.45 per cent.  
 1 requires 6 units—42.85 per cent.  
 1 requires 9 units—46.17 per cent.

## LITT. B. (ENDOWED).

1 requires 4 units—24.24 per cent.

## (b) LATIN AND GREEK.

The historic position of Latin and Greek in college entrance requirements warrants special consideration at this point. The accompanying table shows that for the A. B. degree, 14 of the 42 State schools (33.33 per cent) and 26 of the 46 endowed schools (56.5 per cent) prescribed ancient language (Latin and Greek) singly or in combination with foreign or modern language. Latin alone is a requirement in 4 State and 5 endowed schools, as follows: Alabama, 4 units; Florida, 2 units; Pennsylvania State College, 4 units; William and Mary, 3 units; Bowdoin, 3 units; Dartmouth, 4 units; University of the South, 4 units; Tulane, 3 units; Wellesley, 4 units.

Greek is not prescribed alone but is usually combined or optional with Latin or a modern language. Greek is required for the A. B. degree, in combination or as an option, in 5 State and 18 endowed schools. The usual requirements in Greek are 2 or 3 units.

The combination of Latin with a foreign or modern language is found in over twice as many schools as Latin; this combination is

<sup>1</sup> 2 different courses.



with one exception the only one required for the B. S., Ph. B., and Litt. B. degrees in the schools prescribing ancient language.

It will be observed that of the nine institutions prescribing Latin only, five are southern and four are from New England, or from the East, and of the entire group only five institutions are from the central or western parts of the United States.

TABLE 5.—*Entrance requirements in Latin and Greek.*

## STATE INSTITUTIONS.

Latin only.	Latin and Greek, or Latin or Greek.	Latin and foreign language.	Ancient and modern.
Alabama. Florida. Pennsylvania State College. William and Mary.	Howard. North Carolina. Vermont. Virginia.	Howard, B. S. Georgia. Rutgers.  Rutgers, B. S. North Carolina, group 2. Vermont, Ph. B. Wisconsin.	California (A). Delaware.
4	4	4 A. B., 2 B. S., 1 Ph. B.	2

## ENDOWED INSTITUTIONS.

Bowdoin.	Brown.	Amherst.	Catholic University of America.
Dartmouth. South, University of the. Tulane. Wellesley.	Haverford. Oberlin. Princeton. Smith. Trinity. Union. Vanderbilt. Wesleyan.	Colorado College. Columbia. Hamilton, B. S. Johns Hopkins. Lafayette. Lafayette, B. S. Muhlenberg, B. S., also Ph. B. New York. Princeton, B. S. and Litt. B. Randolph-Macon. Syracuse. Wells.	Harvard. Muhlenberg.
5	9	9 A. B., 4 B. S., 1 Ph. B., and 1 Litt. B.	3

TABLE 6.—*Entrance requirements in mathematics for the bachelor's degree.*

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in mathematics.	Per cent required in mathematics.
1	University of Missouri.....	15	1	6.66
2	University of North Dakota.....	15	1	6.66
3	Indiana University.....	16	2	12.50
4	University of Porto Rico.....	16	2	12.50
5	University of California.....	15	2	13.33
6	University of Colorado.....	15	2	13.33
7	Howard University (D. C.).....	15	2	13.33
8	University of Idaho.....	15	2	13.33
9	University of Illinois.....	15	2	13.33
10	University of Michigan.....	15	2	13.33
11	University of Minnesota.....	15	2	13.33
12	University of Montana.....	15	2	13.33
13	University of Nebraska.....	15	2	13.33
14	University of New Mexico.....	15	2	13.33
15	Cornell University.....	15	2	13.33
16	University of Nevada.....	15	2	13.33

TABLE 6.—*Entrance requirements in mathematics for the bachelor's degree*—Continued.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Units required in mathematics.	Per cent required in mathematics.
17	Ohio State University.....	15	2	13.33
18	Ohio University.....	15	2	13.33
19	Miami University (Ohio).....	15	2	13.33
20	University of Oklahoma.....	15	2	13.33
21	University of Oregon.....	15	2	13.33
22	University of South Dakota.....	15	2	13.33
23	University of Utah.....	15	2	13.33
24	University of Washington.....	15	2	13.33
25	State College of Washington.....	15	2	13.33
26	West Virginia University.....	15	2	13.33
27	University of Wyoming.....	15	2	13.33
28	University of Arkansas.....	14	2	14.28
29	Pennsylvania State College.....	14	2	14.28
30	University of Wisconsin.....	14	2	14.28
31	State University of Iowa.....	15	2½	16.65
32	University of Arizona.....	15	2½	16.66
33	University of Kansas.....	15	2½	16.66
34	University of Kentucky.....	15	2½	16.66
35	University of Maine.....	14½	2½	17.22
36	University of Vermont.....	14½	2½	17.22
37	Delaware College.....	14	2½	17.86
38	University of Georgia.....	14	2½	17.86
39	Louisiana State University.....	14	2½	17.86
40	University of Mississippi.....	14	2½	17.86
41	University of North Carolina.....	14	2½	17.86
42	University of Tennessee.....	14	2½	17.86
43	University of Texas.....	14	2½	17.86
44	University of Virginia.....	14	2½	17.86
45	College of William and Mary.....	14	2½	17.86
46	University of Florida.....	16	3	18.75
47	Rutgers College (N. J.).....	15	3	20.00
48	University of South Carolina.....	14	3	21.43
49	University of Alabama.....	14	3	21.43

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in mathematics.	Per cent required in mathematics.
1	Leland Stanford.....	15	0	.....
2	University of Chicago.....	15	0	.....
3	Beloit College.....	15	2	13.33
4	Carleton College.....	15	2	13.33
5	Colorado College.....	15	2	13.33
6	Earlham College.....	15	2	13.33
7	Northwestern University.....	15	2	13.33
8	University of Pittsburgh.....	15	2	13.33
9	Syracuse University.....	15	2	13.33
10	Tufts College.....	15	2	13.33
11	Harvard University.....	16½	2½	15.15
12	Princeton University.....	16½	2½	15.15
13	DePauw University.....	16	2½	15.62
14	Colgate University.....	15	2½	16.66
15	Grinnell College.....	15	2½	16.66
16	Muhlenberg College.....	15	2½	16.66
17	New York University.....	15	2½	16.66
18	Vanderbilt University.....	15	2½	16.66
19	Washington University.....	15	2½	16.66
20	Washington and Lee University.....	15	2½	16.66
21	Baker University.....	15	2½	16.66
22	George Washington University.....	15	2½	16.66
23	Bowdoin College.....	14½	2½	17.22
24	Hamilton College.....	14½	2½	17.22
25	Haverford College.....	14½	2½	17.22
26	University of Pennsylvania.....	14½	2½	17.22
27	Smith College.....	14½	2½	17.22
28	Wells College.....	14½	2½	17.22
29	Wesleyan University.....	14½	2½	17.22
30	Lafayette College.....	14½	2½	17.22
31	Williams College.....	14½	2½	17.22
32	Johns Hopkins University.....	14½	2½	17.22
33	Swarthmore College.....	14½	2½	17.22
34	Randolph-Macon College.....	14	2½	17.86
35	Brown University.....	14½	2½	17.22
36	Dartmouth College.....	14½	2½	17.22
37	Amherst College.....	14	2½	17.86

TABLE 6.—*Entrance requirements in mathematics for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Units required in mathe- matics.	Per cent required in mathe- matics.
38	Union University.....	14	2½	17.86
39	Yale University.....	17	3	17.64
40	Catholic University of America (school of letters).....	16	3	18.75
41	Columbia University.....	20	3	15
42	Oberlin College.....	20	3	15
43	Trinity College (N. C.).....	20	3	15
44	Tulane University.....	20	3	15
45	Vassar College.....	20	3	15
46	Wellesley College.....	20	3	15
47	Western Reserve University.....	20	3	15
48	University of the South.....	14	3	21.42
49	Catholic University of America (school of philosophy).....	19½	3½	17.95
50	Catholic University of America (school of sciences).....	18½	3½	18.90
51	Bryn Mawr College.....	20	4	20

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	College of Hawaii.....	15	0	.....
2	University of North Dakota.....	15	1	6.66
3	University of Porto Rico.....	16	2	12.50
4	Howard University (D. C.).....	15	2	13.33
5	University of Idaho.....	15	2	13.33
6	University of Illinois.....	15	2	13.33
7	University of Nebraska.....	15	2	13.33
8	New Hampshire College.....	15	2	13.33
9	University of Nevada.....	15	2	13.33
10	State College of Washington.....	15	2	13.33
11	University of Arkansas.....	14	2	14.28
12	University of Arizona.....	15	2½	16.66
13	University of Kentucky.....	15	2½	16.66
14	University of Vermont.....	14½	2½	17.22
15	College of William and Mary.....	14	2½	17.86
16	Delaware College.....	14	2½	17.86
17	University of Mississippi.....	14	2½	17.86
18	University of Virginia.....	14	2½	17.86
19	University of Florida.....	16	3	18.75
20	Rutger's College (N. J.).....	15	3	20
21	University of Alabama.....	14	3	21.43
22	University of South Carolina.....	14	3	21.43

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Beloit College.....	15	2	13.33
2	Carleton College.....	15	2	13.33
3	University of Chicago.....	15	2	13.33
4	Earlham College.....	15	2	13.33
5	Northwestern University.....	15	2	13.33
6	University of Pittsburgh.....	15	2	13.33
7	Syracuse University.....	15	2	13.33
8	Tufts College.....	15	2	13.33
9	Princeton University.....	16½	2½	15.15
10	Harvard University.....	16½	2½	15.15
11	Colgate University.....	15	2½	16.66
12	Grinnell College.....	15	2½	16.66
13	Muhlenberg College.....	15	2½	16.66
14	Bowdoin College.....	14½	2½	17.22
15	Dartmouth College.....	14½	2½	17.22
16	Hamilton College.....	14½	2½	17.22
17	Haverford College.....	14½	2½	17.22
18	Lafayette College.....	14½	2½	17.22
19	Wesleyan University.....	14½	2½	17.22
20	Randolph-Macon College.....	14	2½	17.86
21	Columbia University.....	15	3	20
22	Tulane University.....	15	3	20
23	Vanderbilt University.....	15	3	20
24	University of the South.....	14	3	21.42
25	Union University.....	14	3	21.42
26	New York University.....	15	3½	23.33
27	Catholic University of America (school of sciences).....	14½	3½	24.10

TABLE 6.—*Entrance requirements in mathematics for the bachelor's degree—Continued.*

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

	Institution.	Total entrance units required.	Units required in mathematics.	Per cent required in mathematics.
1	University of Missouri.....	15	1	6.66
2	University of North Dakota.....	15	1	6.66
3	University of Colorado.....	15	2	13.33
4	Howard University (D. C.).....	15	2	13.33
5	University of Idaho.....	15	2	13.33
6	University of Michigan.....	15	2	13.33
7	University of Minnesota.....	15	2	13.33
8	University of New Mexico.....	15	2	13.33
9	University of Nebraska.....	15	2	13.33
10	University of Nevada.....	15	2	13.33
11	Ohio State University.....	15	2	13.33
12	Miami University (Ohio).....	15	2	13.33
13	University of Oregon.....	15	2	13.33
14	University of Oklahoma.....	15	2	13.33
15	University of Utah.....	15	2	13.33
16	University of Washington.....	15	2	13.33
17	University of Wyoming.....	15	2	13.33
18	State University of Iowa.....	15	2½	16.66
19	University of Vermont.....	14½	2½	17.22
20	University of Kansas.....	15	2½	16.66
21	University of Georgia.....	14	2½	17.86
22	University of Louisiana.....	14	2½	17.86
23	University of North Carolina.....	14	2½	17.86
24	University of Tennessee.....	14	2½	17.86
25	University of Texas.....	14	2½	17.86
26	University of Florida.....	16	3	18.75
27	University of South Carolina.....	14	3	21.42
28	University of Alabama.....	14	3	21.42

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	15	2	13.33
2	Johns Hopkins University and Goucher College.....	15	2	13.33
3	George Washington University.....	15	2½	16.66
4	Tulane University.....	15	3	20

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	University of Vermont (for Ph. B.).....	14½	2½	17.22
1	Rutgers College (N. J.) (for Litt. B.).....	15	3	20

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES.

1	Muhlenberg College (for Ph. B.).....	15	2½	16.66
2	Brown University (for Ph. B.).....	14½	2½	17.22
3	Hamilton College (for Ph. B.).....	14½	2½	17.22
4	Lafayette College (for Ph. B.).....	14½	2½	17.22
5	Union University (for Ph. B.).....	14	2½	17.86
6	Catholic University of America (for Ph. B.).....	19½	3½	17.93
1	Princeton University (for Litt. B.).....	16½	2½	15.15

## MATHEMATICS.

Table 6 shows that mathematics is required by all State universities and colleges for entrance to the A. B. curricula. Likewise all of the endowed schools, with the exception of Chicago and Leland Stanford, prescribe it.

Mathematics is not prescribed by Hawaii or Chicago for the B. S. degree, but is required by all other institutions.

Mathematics is not prescribed by Mississippi or Arkansas for the bachelor's degree in education, neither is it prescribed by Chicago or Columbia of the endowed schools.

Mathematics is not required by Chicago for the Ph. B. degree, but is required for entrance to the Ph. B. and Litt. B. course in all other cases.

Next to English mathematics is the most generally prescribed entrance subject, but the standard is more variable. It varies from 1 to 4 units or from 6.66 to 24.10 per cent of the total entrance requirements. The general average is  $2\frac{1}{2}$  units.

TABLE 7.—*Mathematics.*

[Units.]

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	1	3	2.19	14.92	2	13.33	2	12.50 to 14.28
A. B. (endowed).....	2	4	2.58	16.95	$2\frac{1}{2}$	17.22	$2\frac{1}{2}$	15.15 to 17.86
B. S. (State).....	1	3	2.30	15.73	$2\frac{1}{2}$	15.75	2	12.50 to 14.28
B. S. (endowed).....	2	$3\frac{1}{2}$	2.51	17.00	$2\frac{1}{2}$	16.66	$2\frac{1}{2}$	16.66 to 17.86
B. Ed. (State).....	1	3	2.17	14.81	2	13.33	2	13.33
B. Ed. (endowed).....	2	3	2.37	15.83	2	13.33	2	13.33
Ph. B. (State).....	( $2\frac{1}{2}$ )	( $2\frac{1}{2}$ )	(2.50)	(17.22)	( $2\frac{1}{2}$ )	(17.22)	( $2\frac{1}{2}$ )	(17.22)
Ph. B. (endowed).....	$2\frac{1}{2}$	$3\frac{1}{2}$	2.66	17.35	$2\frac{1}{2}$	17.22	$2\frac{1}{2}$	16.66 to 17.28
Litt. B. (State).....	(3)	(3)	(3.00)	(20.00)	(3)	(20.00)	(3)	(20.00)
Litt. B. (endowed).....	( $2\frac{1}{2}$ )	( $2\frac{1}{2}$ )	(2.50)	(15.15)	( $2\frac{1}{2}$ )	(15.15)	( $2\frac{1}{2}$ )	(15.15)
General average.....	.....	.....	2.50	15.96	.....	.....	.....	.....

According to Table 7, the average of entrance requirements in mathematics for the A. B. degree is slightly higher in endowed schools than in those of the State. This is true of all endowed schools for all degrees with the exception of the Litt. B. degree, in which case the State school requires slightly more.

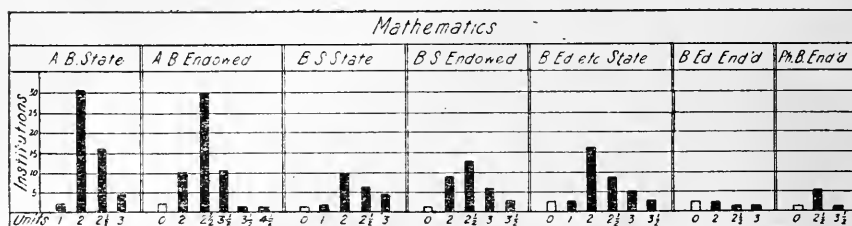
*The mode.*

## MATHEMATICS.

Degree.	Number of schools (2 units).	Number of schools ( $2\frac{1}{2}$ units).	Number of cases.
A. B. (State).....	28	15	49
A. B. (endowed).....	9	28	51
B. S. (State).....	9	7	22
B. S. (endowed).....	8	12	27
B. Ed. (State).....	15	8	28
B. Ed. (endowed).....	2	1	4
Ph. B. (State).....	0	1	1
Ph. B. (endowed).....	0	5	6
Litt. B. (State).....	0	0	1
Litt. B. (endowed).....	0	1	1
Total.....	71	78	190

In 71 out of 190 cases (37 per cent) 2 units in mathematics are prescribed; in 78 out of 196 cases (41 per cent)  $2\frac{1}{2}$  units are prescribed.

Inspection of Graph 3 shows that 2 units is the mode for the State schools while  $2\frac{1}{2}$  units is the mode for the endowed.



GRAPH 3.

*Summary of frequencies—mathematics.*

## A. B. (STATE).

- 2 require 1 unit—6.66 per cent.
- 28 require 2 units—12.50 to 14.28 per cent.
- 15 require  $2\frac{1}{2}$  units—16.66 to 17.86 per cent.
- 4 require 3 units—18.75 to 21.43 per cent.

## B. S. (STATE).

- 1 requires 0 units.
- 1 requires 1 unit—13.33 per cent.
- 9 require 2 units—12.50 to 14.28 per cent.
- 6 require  $2\frac{1}{2}$  units—17.22 to 17.86 per cent.
- 4 require 3 units—18.75 to 21.43 per cent.

## B. ED. ETC. (STATE).

- 2 require 0 units.
- 2 require 1 unit—6.66 per cent.
- 15 require 2 units—13.33 per cent.
- 8 require  $2\frac{1}{2}$  units—15.15 to 17.86 per cent.
- 5 require 3 units—20 to 21.42 per cent.
- 2 require  $3\frac{1}{2}$  units—23.33 to 24.10 per cent.

## PH. B. (STATE).

- 1 requires  $2\frac{1}{2}$  units—17.22 per cent.

## LITT. B. (STATE).

- 1 requires 3 units—20 per cent.

## A. B. (ENDOWED).

- 2 require 0 units.
- 9 require 2 units—13.33 per cent.
- 28 require  $2\frac{1}{2}$  units—15.15 to 17.86 per cent.
- 10 require 3 units—18.75 to 21.42 per cent.
- 1 requires  $3\frac{1}{2}$  units—17.95 to 18.9 per cent.
- 1 requires 4 units—20 per cent.

## B. S. (ENDOWED).

- 1 requires 0 units.
- 8 require 2 units—13.33 per cent.
- 12 require  $2\frac{1}{2}$  units—16.66 to 17.86 per cent.
- 5 require 3 units—20 to 21.42 per cent.
- 2 require  $3\frac{1}{2}$  units—23.33 to 24.10 per cent.

## B. ED. ETC. (ENDOWED).

- 2 require 0 units.
- 2 require 2 units—13.33 per cent.
- 1 requires  $2\frac{1}{2}$  units—16.66 per cent.
- 1 requires 3 units—20 per cent.

## PH. B. (ENDOWED).

- 1 requires 0 units.
- 5 require  $2\frac{1}{2}$  units—16.66 to 17.86 per cent.
- 1 requires  $3\frac{1}{2}$  units—17.93 per cent.

## LITT. B. (ENDOWED).

- 1 requires  $2\frac{1}{2}$  units—15.15 per cent.

TABLE 8.—*Entrance requirements in science for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in science.	Per cent required in science.
1	University of Florida.....	16	1	6.25
2	Indiana University.....	16	1	6.25
3	University of Porto Rico.....	16	1	6.25
4	University of Arizona.....	15	1	6.66
5	University of California.....	15	1	6.66
6	University of Idaho.....	15	1	6.66
7	University of Illinois.....	15	1	6.66
8	University of Kentucky.....	15	1	6.66
9	University of Michigan.....	15	1	6.66
10	University of Montana.....	15	1	6.66
11	University of Nebraska.....	15	1	6.66
12	University of New Mexico.....	15	1	6.66
13	Ohio State University.....	15	1	6.66
14	Ohio University.....	15	1	6.66
15	Miami University (Ohio).....	15	1	6.66
16	University of Oklahoma.....	15	1	6.66
17	University of Oregon.....	15	1	6.66
18	University of Washington.....	15	1	6.66
19	West Virginia University.....	15	1	6.66
20	University of Wyoming.....	15	1	6.66
21	Delaware College.....	14	1	7.18
22	University of North Carolina.....	14	1	7.18
23	University of South Carolina.....	14	1	7.18
24	University of California.....	15	2	13.33
25	University of Colorado.....	15	2	13.33
26	University of Kansas.....	15	2	13.33

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in science.	Per cent required in science.
1	Bryn Mawr College.....	20	1	5.00
2	Harvard University.....	16½	1	6.06
3	Baker University.....	15	1	6.66
4	Beloit College.....	15	1	6.66
5	Earlham College.....	15	1	6.66
6	Grinnell College.....	15	1	6.66
7	Oberlin College.....	15	1	6.66
8	Syracuse University.....	15	1	6.66
9	Washington University (St. Louis).....	15	1	6.66
10	Johns Hopkins University.....	19½	1	6.90
11	Catholic University of America (school of sciences).....	18½	2	10.8
12	Catholic University of America (school of philosophy).....	19½	2	10.26
13	Colorado College.....	15	2	13.33

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in science.	Per cent required in science.
1	University of Florida.....	16	1	6.25
2	University of Porto Rico.....	16	1	6.25
3	University of Arizona.....	15	1	6.66
4	University of Idaho.....	15	1	6.66
5	University of Kentucky.....	15	1	6.66
6	University of Nebraska.....	15	1	6.66
7	New Hampshire College.....	15	1	6.66
8	University of Vermont.....	14½	1	6.89
9	University of Arkansas.....	14	1	7.14
10	Delaware College.....	14	1	7.14
11	University of South Carolina.....	14	1	7.14
12	College of William and Mary.....	14	1	7.14
13	Howard University (D. C.).....	15	2	13.33
14	University of Illinois.....	15	2	13.33
15	Rutgers College (N. J.).....	15	3	20.00

TABLE 8.—*Entrance requirements in science for the bachelor's degree—Continued.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in science.	Per cent required in science.
1	Harvard University.....	16½	1	6.06
2	Beloit College.....	15	1	6.66
3	Earlham College.....	15	1	6.66
4	Grinnell College.....	15	1	6.66
5	Muhlenberg College.....	15	1	6.66
6	New York University.....	15	1	6.66
7	Dartmouth College.....	14½	1	6.90
8	Lafayette College.....	14½	1	6.90
9	Union University.....	14	1	7.14
10	Columbia University.....	15	2	13.33
11	Syracuse University.....	15	2	13.33
12	Tulane University.....	15	2	13.33
13	Catholic University of America (school of sciences).....	14½	2	13.80

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Florida.....	16	1	6.25
2	University of Idaho.....	15	1	6.66
3	University of Michigan.....	15	1	6.66
4	University of New Mexico.....	15	1	6.66
5	University of Nebraska.....	15	1	6.66
6	Ohio State University.....	15	1	6.66
7	Ohio University.....	15	1	6.66
8	University of Oregon.....	15	1	6.66
9	University of Oklahoma.....	15	1	6.66
10	University of Washington.....	15	1	6.66
11	University of Wyoming.....	15	1	6.66
12	University of Arkansas.....	14	1	7.14
13	University of South Carolina.....	14	1	7.14
14	University of Colorado.....	15	2	13.33
15	University of Kansas.....	15	2	13.33

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	15	1	6.66
2	Johns Hopkins University and Goucher College.....	15	1	6.66

FOR PH. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Lafayette College.....	14½	1	6.91
2	Catholic University of America (school of philosophy).....	19½	2	10.26

## SCIENCE.

According to Table 8, science is required for entrance to the A. B. course by 26 of the 49 States schools and by 13 of the 50 endowed schools.

It is required by 15 of the 23 State and by 13 of the 28 endowed schools for entrance to the B. S. course.

It is also required by 15 of the 30 State schools and 2 of the endowed for entrance to the course in education.

Two endowed schools require science for entrance to the Ph. B. course, but it is not an entrance requirement for the Ph. B. (State) nor for the Litt. B. degree.



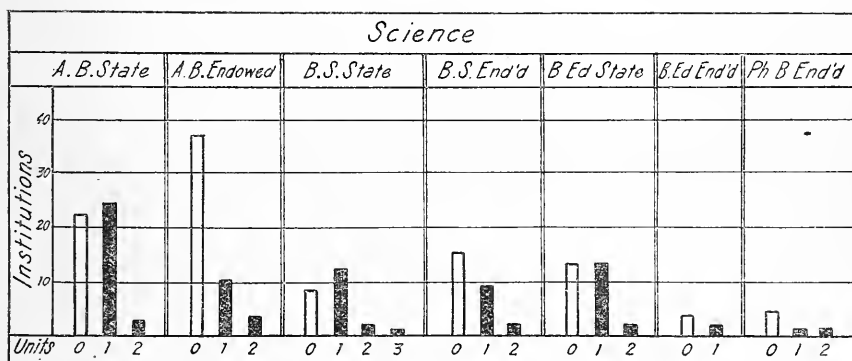
TABLE 9.—*Science.*

[Units.]

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	1	2	1.12	7.43	1	6.66	1	6.25 to 7.14
A. B. (endowed).....	1	2	1.23	7.61	1	6.66	1	5 to 6.66
B. S. (State).....	1	3	1.26	7.19	1	6.77	1	6.25 to 7.14
B. S. (endowed).....	1	2	1.30	8.80	1	6.90	1	6.45 to 7.14
B. Ed. (State).....	1	2	1.13	7.58	1	6.66	1	6.25 to 7.14
B. Ed. (endowed).....	1	1	1.00	6.66	1	6.66	1	6.66
Ph. B. (State).....	1	2	1.50	8.58	1½	8.58	1	8.58
Ph. B. (endowed).....	1	2	1.50	8.58	1½	8.58	1	8.58
General average.....			1.19	7.66				

It is evident from Table 9 that the quantitative standards for science are very uniform. It might be expected that more science would be required for entrance to the B. S. degree, but this is true only of the B. S. (endowed) and for the Ph. B. (endowed).

There is but one common mode (1 unit) for the different degrees as is shown in Graph 4.



GRAPH 4.

*The mode (1 unit).*

SCIENCE.

Degree.	Number of schools.	Number of cases.
A. B. (State).....	23	26
A. B. (endowed).....	10	13
B. S. (State).....	12	15
B. S. (endowed).....	9	13
B. Ed. (State).....	13	15
B. Ed. (endowed).....	2	2
Ph. B. (State).....	0	0
Ph. B. (endowed).....	1	2
Litt. B. (State).....	0	0
Litt. B. (endowed).....	0	0
Total.....	70	86

In 70 out of 86 cases (81.39 per cent) 1 unit in science is prescribed.

*Summary of frequencies—science.*

A. B. (STATE).	A. B. (ENDOWED).
23 require 1 unit—6.25 to 7.14 per cent. 3 require 2 units—13.33 per cent.	10 require 1 unit—5 to 6.66 per cent. 3 require 2 units—10.26 to 13.33 per cent.
B. S. (STATE).	B. S. (ENDOWED).
12 require 1 unit—6.25 to 7.14 per cent. 2 require 2 units—13.33 per cent.	9 require 1 unit—6.45 to 7.14 per cent. 2 require 2 units—13.33 per cent.
B. ED., ETC. (STATE).	B. ED., ETC. (ENDOWED).
13 require 1 unit—6.25 to 7.14 per cent.	2 require 1 unit—6.66 per cent.
LITT. B. (STATE).	PH. B. (ENDOWED).
None.	1 requires 1 unit—6.91 per cent. 1 requires 2 units—10.26 per cent.

TABLE 10.—*Entrance requirements in social science for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in social science.	Per cent required in social science.
1	University of Florida.....	16	1	6.25
2	University of Indiana.....	16	1	6.25
3	University of Porto Rico.....	16	1	6.25
4	University of Arizona.....	15	1	6.66
5	University of California.....	15	1	6.66
6	Howard University (D. C.).....	15	1	6.66
7	University of Idaho.....	15	1	6.66
8	State University of Iowa.....	15	1	6.66
9	State University of Kansas.....	15	1	6.66
10	University of Kentucky.....	15	1	6.66
11	University of Montana.....	15	1	6.66
12	University of Nebraska.....	15	1	6.66
13	Rutgers College (N. J.).....	15	1	6.66
14	University of New Mexico.....	15	1	6.66
15	Cornell University.....	15	1	6.66
16	Ohio State University.....	15	1	6.66
17	Ohio University.....	15	1	6.66
18	Miami University (Ohio).....	15	1	6.66
19	University of Oklahoma.....	15	1	6.66
20	University of Oregon.....	15	1	6.66
21	University of Utah.....	15	1	6.66
22	University of Washington.....	15	1	6.66
23	West Virginia University.....	15	1	6.66
24	University of Vermont.....	14 $\frac{1}{2}$	1	6.90
25	University of Maine.....	14 $\frac{1}{2}$	1	6.90
26	University of Arkansas.....	14	1	7.14
27	Delaware College.....	14	1	7.14
28	University of Louisiana.....	14	1	7.14
29	University of North Carolina.....	14	1	7.14
30	Pennsylvania State College.....	14	1	7.14
31	University of Virginia.....	14	1	7.14
32	College of William and Mary.....	14	1	7.14
33	University of Colorado.....	15	2	13.33
34	Howard University (D. C.).....	15	2	13.33
35	University of Wyoming.....	15	2	13.33
36	University of Georgia.....	14	2	14.28
37	University of Mississippi.....	14	2	14.28
38	University of Texas.....	11	2	14.28
39	University of South Carolina.....	14	3	21.42

TABLE 10.—*Entrance requirements in social science for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in social science.	Per cent required in social science.
1	Bryn Mawr College.....	20	1	5.00
2	Harvard University.....	16½	1	6.06
3	Catholic University of America (school of letters).....	16	1	6.25
4	DePauw University.....	16	1	6.25
5	Baker University.....	15	1	6.66
6	Beloit College.....	15	1	6.66
7	Colorado College.....	15	1	6.66
8	Earlham College.....	15	1	6.66
9	Grinnell College.....	15	1	6.66
10	Oberlin College.....	15	1	6.66
11	University of Pittsburgh.....	15	1	6.66
12	Tufts College.....	15	1	6.66
13	Vassar College.....	15	1	6.66
14	Washington University (St. Louis).....	15	1	6.66
15	Washington and Lee University.....	15	1	6.66
16	Wellesley College.....	15	1	6.66
17	Brown University.....	14½	1	6.90
18	Dartmouth College.....	14½	1	6.90
19	Hamilton College.....	14½	1	6.90
20	Haverford College.....	14½	1	6.90
21	Pennsylvania University.....	14½	1	6.90
22	Bowdoin College.....	14½	1	6.90
23	Johns Hopkins University.....	14½	1	6.90
24	Smith College.....	14½	1	6.90
25	Wells College.....	14½	1	6.90
26	Wesleyan University.....	14½	1	6.90
27	Lafayette College.....	14½	1	6.90
28	Williams College.....	14½	1	6.90
29	Amherst College.....	14	1	7.14
30	Randolph-Macon College.....	14	1	7.14
31	Catholic University of America (school of sciences).....	18½	2	10.80
32	Catholic University of America (school of philosophy).....	19½	2	10.26
33	Swarthmore College.....	14½	2	13.80
34	Union University.....	14	2	14.28

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Florida.....	16	1	6.25
2	University of Porto Rico.....	16	1	6.25
3	University of Arizona.....	15	1	6.66
4	University of Idaho.....	15	1	6.66
5	University of Kentucky.....	15	1	6.66
6	University of Nebraska.....	15	1	6.66
7	New Hampshire College.....	15	1	6.66
8	University of Vermont.....	14½	1	6.90
9	University of Arkansas.....	14	1	7.14
10	Delaware College.....	14	1	7.14
11	University of Virginia.....	14	1	7.14
12	College of William and Mary.....	14	1	7.14
13	Howard University (D. C.).....	15	2	13.33
14	University of Mississippi.....	14	2	14.28
15	Rutgers College (N. J.).....	15	3	20.00
16	University of South Carolina.....	14	3	21.42

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Harvard University.....	16½	1	6.06
2	Beloit College.....	15	1	6.66
3	Earlham College.....	15	1	6.66
4	Grinnell College.....	15	1	6.66
5	University of Pittsburgh.....	15	1	6.66
6	Syracuse University.....	15	1	6.66
7	Tufts College.....	15	1	6.66
8	Dartmouth College.....	14½	1	6.90
9	Hamilton College.....	14½	1	6.90
10	Haverford College.....	14½	1	6.90
11	Bowdoin College.....	14½	1	6.90
12	Lafayette College.....	14½	1	6.90
13	Randolph-Macon College.....	14	1	7.14
14	Union University.....	14	1	7.14
15	Tulane University.....	15	2	13.33
16	Catholic University of America, (school of sciences).....	14½	2	13.80

TABLE 10.—*Entrance requirements in social science for the bachelor's degree*—Continued.

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

	Institution.	Total entrance units required.	Units required in social science.	Per cent required in social science.
1	University of Florida.....	16	1	6.25
2	Howard University (D. C.).....	15	1	6.66
3	University of Idaho.....	15	1	6.66
4	State University of Iowa.....	15	1	6.66
5	University of Kansas.....	15	1	6.66
6	University of New Mexico.....	15	1	6.66
7	University of Nebraska.....	15	1	6.66
8	Ohio State University.....	15	1	6.66
9	Miami University (Ohio).....	15	1	6.66
10	University of Oregon.....	15	1	6.66
11	University of Oklahoma.....	15	1	6.66
12	University of Utah.....	15	1	6.66
13	University of Washington.....	15	1	6.66
14	University of Vermont.....	15	1	6.66
15	University of Arkansas.....	14	1	7.14
16	University of Louisiana.....	14	1	7.14
17	University of North Carolina.....	14	1	7.14
18	University of Colorado.....	15	2	13.33
19	University of Wyoming.....	15	2	13.33
20	University of Georgia.....	14	2	14.28
21	University of Texas.....	14	2	14.28
22	University of South Carolina.....	14	3	21.42

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	15	1	6.66
2	Johns Hopkins University and Goucher College.....	15	1	6.66

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.) (for Litt. B.).....	15	1	6.66
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## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES.

1	Muhlenberg College (for Ph. B.).....	15	1	6.66
2	Hamilton College (for Ph. B.).....	14½	1	6.90
3	Lafayette College (for Ph. B.).....	14½	1	6.90
4	Catholic University of America (for Ph. B.).....	19½	2	10.26
5	Union University (for Ph. B.).....	14	2	14.28
6	Brown University (for Ph. B.).....	14½	1	6.90

## SOCIAL SCIENCE.

(Including history, civil government, and economics.)

According to Table 10, history or social science is a prescribed entrance requirement for the A. B. degree by 39 of the 49 State schools and 33 of the 50 endowed.

It is prescribed for the B. S. degree by 16 of the 23 State schools and 16 of the 27 endowed.

It is prescribed for the B. Ed. degree by 22 out of 30 State schools and by 2 endowed.

Social science is not prescribed for the Ph. B. (State) nor the Litt. B. (endowed), but it is prescribed for the Ph. B. (endowed) by 6 institutions.

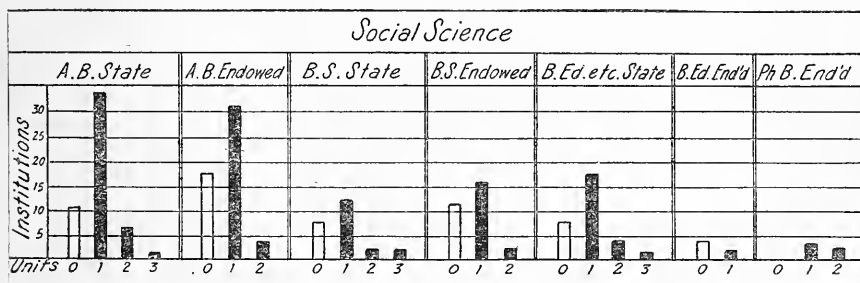
TABLE 11.—*Social science.*

[Units.]

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Me- dian.	Per cent.	Mode.	Per cent.
A. B. (State).....	1	3	1.20	8.03	1	6.66	1	6.25 to 7.14
A. B. (endowed).....	1	2	1.11	7.14	1	6.90	1	5 to 7.14
B. S. (State).....	1	3	1.37	9.39	1	6.90	1	6.25 to 7.14
B. S. (endowed).....	1	2	1.12	7.69	1	6.90	1	6.45 to 7.14
B. Ed. (State).....	1	3	1.27	8.67	1	6.66	1	6.25 to 7.14
B. Ed. (endowed).....	1	1	1.00	6.66	1	6.66	1	6.66
Ph. B. (endowed).....	1	2	1.33	8.64	1	6.90	1	6.66 to 6.91
Litt. B. (State).....	(1)	(1)	(1.00)	(6.66)	(1)	(6.66)	1	(6.66)
General average.....			1.20	8.03				

Table 11 shows that entrance requirements of the State schools in social science average slightly higher than those of the endowed schools, the Ph. B. and Litt. B. degrees not being included in the comparison.

Graph 5 gives 1 unit as the mode, and the following table shows the proportion of the schools requiring the mode to the total number requiring social science:



GRAPH 5.

*The mode (1 unit).*

SOCIAL SCIENCE.

Degree.	Number of schools.	Number of cases.
A. B. (State).....	33	39
A. B. (endowed).....	30	33
B. S. (State).....	12	16
B. S. (endowed).....	15	16
B. Ed. (State).....	17	22
B. Ed. (endowed).....	2	2
Ph. B. (State).....	0	0
Ph. B. (endowed).....	3	6
Litt. B. (State).....	1	1
Litt. B. (endowed).....	0	0
Total.....	113	135

In 113 out of 135 cases (76.44 per cent), 1 unit in social science is prescribed.

*Summary of frequencies—social science.*

A. B. (STATE).	A. B. (ENDOWED).
33 require 1 unit—6.25 to 7.14 per cent.	30 require 1 unit—5 to 7.14 per cent.
6 require 2 units—13.33 to 14.28 per cent.	3 require 2 units—10.8 to 14.28 per cent.
1 requires 3 units—21.42 per cent.	
B. S. (STATE).	B. S. (ENDOWED).
12 require 1 unit—6.25 to 7.14 per cent.	15 require 1 unit—6.45 to 7.14 per cent.
2 require 2 units—13.33 to 14.28 per cent.	2 require 2 units—13.33 to 13.80 per cent
2 require 3 units—20 to 21.42 per cent.	
B. ED. ETC. (STATE).	B. ED. ETC. (ENDOWED).
17 require 1 unit—6.25 to 7.14 per cent.	2 require 1 unit—6.66 per cent.
4 require 2 units—13.33 to 14.28 per cent.	
1 requires 3 units—21.42 per cent.	
PH. B. (STATE).	PH. B. (ENDOWED).
None.	3 require 1 unit—6.66 to 6.91 per cent.
	2 require 2 units—10.26 to 14.28 per cent.
LITT. B. (STATE).	LITT. B. (ENDOWED).
1 requires 1 unit—6.66 per cent.	None.

TABLE 11a.—*Entrance requirements in industries for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Units required in industries.	Per cent required in industries.
1	University of Porto Rico.....	16	2	12.50

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Porto Rico.....	16	2	12.50
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INDUSTRIAL STUDIES.

Industrial study is prescribed for entrance to the University of Porto Rico for both the A. B. and B. S. degrees, to the extent of 2 units, or 12.50 per cent of the 16 entrance units.

This subject is not prescribed in any of the other schools, State or endowed.

TABLE 12.—Total prescribed entrance requirements for the bachelor's degree.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total pre-scribed units.	Percent-age of pre-scribed units.
1	University of North Dakota.....	15	4	23.66
2	University of Nevada.....	15	5	33.33
3	University of South Dakota.....	15	5	33.33
4	State College of Washington.....	15	5	33.33
5	University of Missouri.....	15	6	40
6	University of Utah.....	15	6	49
7	University of Mississippi.....	14	7½	53.56
8	University of Illinois.....	15	8	53.33
9	University of Michigan.....	15	8	53.33
10	State University of Iowa.....	15	8½	56.64
11	University of Louisiana.....	14	8½	60.69
12	Indiana University.....	16	9	56.25
13	University of California.....	15	9	60
14	University of Idaho.....	15	9	60
15	University of Minnesota.....	15	9	60
16	University of Nebraska.....	15	9	60
17	University of New Mexico.....	15	9	60
18	Miami University (Ohio).....	15	9	60
19	University of Oklahoma.....	15	9	60
20	University of Oregon.....	15	9	60
21	University of Washington.....	15	9	60
22	West Virginia University.....	15	9	60
23	University of Alabama.....	14	9	64.28
24	University of Arkansas.....	14	9	64.28
25	University of Arizona.....	15	9½	63.33
26	University of Kentucky.....	15	9½	63.33
27	College of William and Mary.....	14	9½	67.85
28	University of Tennessee.....	14	9½	67.85
29	University of Florida.....	16	10	62.50
30	University of California.....	15	10	66.66
31	University of Montana.....	15	10	66.66
32	University of Wyoming.....	15	10	66.66
33	Pennsylvania State College.....	14	10	71.42
34	University of South Carolina.....	14	10	71.42
35	University of Wisconsin.....	14	10	71.42
36	University of Maine.....	14½	10	72.4
37	University of Texas.....	14	10½	75
38	University of Virginia.....	14	10½	75
39	Cornell University.....	15	11	73.33
40	Howard University (D. C.).....	15	11	73.33
41	Ohio State University.....	15	11	73.33
42	Ohio University.....	15	11	73.33
43	University of Kansas.....	15	11½	76.66
44	University of North Carolina (group 3).....	14	11½	82.13
45	University of Porto Rico.....	16	12	75
46	Howard University (D. C.).....	15	12	80
47	University of North Carolina (groups 1 and 2).....	14	12½	87.13
48	University of Georgia.....	14	12½	89.27
49	University of Colorado.....	15	13	86.66
50	University of Vermont.....	14½	13	93.01
51	Delaware College.....	14	13½	96.41
52	Rutgers College (N. J.).....	15	14	93.33

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Leland Stanford University.....	15	3	20
2	University of Pittsburgh.....	15	6	40
3	Carleton College.....	15	7	46.66
4	Swarthmore College.....	14½	7	51.75
5	George Washington University.....	15	7½	50
6	Northwestern University.....	15	8	53.33
7	Tufts College.....	15	8	53.33
8	Washington and Lee University.....	15	8½	56.66
9	Colgate University.....	15	8½	56.66
10	University of Chicago.....	15	9	60
11	Earlham College.....	15	9	60
12	Beloit College.....	15	9	60
13	Tulane University.....	15	9	60
14	University of Pennsylvania.....	14½	9	65.45
15	Wesleyan University.....	14½	9	65.45
16	Bowdoin College.....	14½	9½	65.52
17	De Pauw University.....	16	9½	59.37

TABLE 12.—*Total prescribed entrance requirements for the bachelor's degree—Contd.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Total pre- scribed units.	Percent- age of pre- scribed units.
18	Columbia University.....	15	10	66.66
19	Western Reserve University.....	15	10	66.66
20	University of the South.....	14	10	71.42
21	Smith College.....	14½	10	72.4
22	Baker University.....	15	10½	70
23	Haverford College.....	14½	10½	72.34
24	Trinity College (N. C.).....	15	11	73.33
25	Wellesley College.....	15	11	73.33
26	New York University.....	15	11½	76.66
27	Vanderbilt University.....	15	11½	76.66
28	Harvard University.....	16½	11½	69.69
29	Princeton University.....	16½	11½	69.69
30	Grimm College.....	15	11½	76.66
31	Brown University.....	14½	11½	79.23
32	Amherst College.....	14	11½	82.13
33	Colorado College.....	15	12	80
34	Oberlin College.....	15	12	80
35	Syracuse University.....	15	12	80
36	Hamilton College.....	14½	12	86.12
37	Dartmouth College.....	14½	12	86.12
38	Wells College.....	14½	12	86.12
39	Washington University.....	15	12½	83.33
40	Randolph-Macon College.....	14	12½	89.28
41	Union University.....	14	12½	89.28
42	Yale University.....	17	13	76.44
43	Trinity College.....	15	13	86.33
44	Lafayette College.....	14½	13	93.08
45	Williams College.....	14½	13	93.08
46	Muhlenberg College.....	15	13½	90
47	Union University.....	14	13½	96.92
48	Johns Hopkins University.....	14½	14½	100
49	Vassar College.....	15	14	93.33
50	Catholic University of America (school of letters).....	16	16	100
51	Catholic University of America (school of sciences).....	18½	18½	100
52	Catholic University of America (school of philosophy).....	19½	19½	100
53	Bryn Mawr College.....	20	20	100

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	College of Hawaii.....	15	3	20
2	University of North Dakota.....	15	4	26.66
3	University of Nevada.....	15	5	33.33
4	State College of Washington.....	15	5	33.33
5	University of Alabama.....	14	6	42.85
6	University of Illinois.....	15	7	46.66
7	New Hampshire College.....	15	7	46.66
8	University of Arkansas.....	14	7	50
9	University of Mississippi.....	14	7½	53.56
10	University of Idaho.....	15	9	60
11	University of Nebraska.....	15	9	60
12	University of Vermont.....	15½	9	65.45
13	College of William and Mary.....	14	9	67.84
14	University of Arizona.....	15	9½	63.33
15	University of Kentucky.....	15	9½	63.33
16	University of Florida.....	16	10	62.5
17	University of South Carolina.....	14	10	71.42
18	Howard University (D. C.).....	15	10½	73.33
19	University of Virginia.....	14	10½	75
20	University of Porto Rico.....	16	12	75
21	Rutgers College (N. J.).....	15	15	100

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	15	5	33.33
2	University of Pittsburgh.....	15	6	40
3	Tufts College.....	15	7	46.66
4	Carleton College.....	15	7	46.66
5	Columbia University.....	15	8	53.33
6	Northwestern University.....	15	8	53.33
7	Colgate University.....	15	8½	56.66



TABLE 12.—*Total prescribed entrance requirements for the bachelor's degree—Contd.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Total pre-scribed units.	Percent-age of pre-scribed units.
8	Bowdoin College.....	14½	8½	58.62
9	Wesleyan University.....	14½	8½	58.62
10	Beloit College.....	15	9	60
11	Earlham College.....	15	9	60
12	Princeton University.....	16½	9½	57.57
13	Muhlenberg College.....	15	9½	63.33
14	Grinnell College.....	15	9½	63.33
15	Lafayette College.....	14½	9½	65.55
16	Vanderbilt University.....	15	10	66.66
17	University of the South.....	14	10	71.42
18	Union University.....	14	10	71.42
19	Harvard University.....	16½	10½	63.63
20	New York University.....	15	10½	70
21	Dartmouth College.....	14½	10½	72.35
22	Haverford College.....	14½	10½	72.35
23	Randolph-Macon College.....	14	10½	75
24	Hamilton College.....	14½	11½	79.23
25	Syracuse University.....	15	12	80
26	Tulane University.....	15	12	80
27	Catholic University of America (school of sciences).....	14½	14½	100

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Mississippi.....	14	3	21.42
2	University of North Dakota.....	15	4	26.66
3	University of Nevada.....	15	5	33.33
4	University of Arkansas.....	14	5	35.70
5	University of Missouri.....	15	6	40
6	University of Utah.....	15	6	40
7	University of Michigan.....	15	8	53.33
8	State University of Iowa.....	15	8½	56.64
9	University of Louisiana.....	14	8½	60.69
10	University of Idaho.....	15	9	60
11	University of Minnesota.....	15	9	60
12	University of New Mexico.....	15	9	60
13	University of Nebraska.....	15	9	60
14	Miami University (Ohio).....	15	9	60
15	University of Oregon.....	15	9	60
16	University of Oklahoma.....	15	9	60
17	University of Washington.....	15	9	60
18	University of Alabama.....	14	9	64.28
19	University of Tennessee.....	14	9½	67.85
20	University of Georgia.....	14	9½	67.85
21	University of Florida.....	16	10	62.5
22	University of Wyoming.....	15	10	66.66
23	University of South Carolina.....	14	10	71.42
24	University of Texas.....	14	10½	75
25	Ohio State University.....	15	11	73.33
26	University of Kansas.....	15	11½	76.66
27	Howard University (D. C.).....	15	12	80
28	University of North Carolina.....	14	12½	87.13
29	University of Colorado.....	15	13	86.66
30	University of Vermont.....	14½	13	93.01

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	15	3	20
2	Columbia University.....	15	3	20
3	University of Pittsburgh.....	15	6	40
4	George Washington University.....	15	7½	50
5	Tulane University.....	15	9	60
6	Johns Hopkins University and Goucher College.....	15	9	60

TABLE 12.—*Total prescribed entrance requirements for the bachelor's degree—Contd.*

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total pre-scribed units.	Percent-age of pre-scribed units.
1	University of Vermont (for Ph. B.).....	14½	12½	86.12
1	Rutgers College (N. J.) (for Litt. B.).....	15	14	93.33

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Chicago University (for Ph. B.).....	15	3	20
2	Brown University (for Ph. B.).....	14½	9½	65.45
3	Muhlenburg College (for Ph. B.).....	15	11½	76.66
4	Hamilton College (for Ph. B.).....	14½	11½	79.23
5	Lafayette College (for Ph. B.).....	14½	12½	86.2
6	Union University (for Ph. B.).....	14	13½	96.42
7	Catholic University of America (for Ph. B.).....	19½	19½	100
1	Princeton University (for Litt. B.).....	16½	9½	57.51

## TOTAL PRESCRIBED ENTRANCE REQUIREMENTS.

According to Table 12, prescribed entrance work is required for the different degrees by all the institutions in our list. There are none which make the entrance work purely elective.

TABLE 13.—*Prescribed entrance requirements.*

(Units.)

Degree.	Mini-mum.	Maxi-mum.	Average.	Per cent.	Me-dian.	Per cent.	Mode.	Per cent.
A. B. (State).....	4	14	9.02	65.05	9½	63.33	9	56.25 to 64.28 60 to 65.53
A. B. (endowed).....	3	20	10.77	72.41	11	73.33	9 or 11½	or 69.69 to 82.13 60 to 67.84
B. S. (State).....	3	15	7.83	56.67	9	60.00	9	63.73 to 71.43 60 to 64.28
B. S. (endowed).....	5	14½	9.44	63.82	9½	65.00	10½	20 or 60
B. Ed. (State).....	2	13	8.90	46.58	9	60.00	9	(86.12)
B. Ed. (endowed).....	3	9	6.25	41.66	6.7	45.00	3 or 9	76.66 to 79.23
Ph. B. (State).....	(12½)	(12½)	(12.50)	(86.12)	(12½)	(86.12)	12½	(93.33)
Ph. B. (endowed).....	3	19½	11.91	76.41	11½	78.00	11½	(57.57)
Litt. B. (State).....	(14)	(14)	(14)	(93.33)	14	(93.33)	14	
Litt. B. (endowed).....	(9½)	(9½)	(9½)	(57.57)	9½	(57.57)	9½	
General average.....			9.95	68.02				

According to Table 13, the prescribed requirements of endowed schools are approximately 1 unit higher than those of the State schools for the A. B. and B. S. degrees, but for the B. Ed. degree the requirements are nearly 3 units more in the State schools than in the endowed.

Inspection of Table 12 and Graph 6 shows that there is little uniformity of standards in the prescribed requirements, the frequencies usually being small. The nearest approach to a mode is 9 units.

There are 18 different standards in a total of 52 instances for the A. B. degree (State).

There are 21 different standards in a total of 54 instances for the A. B. degree (endowed).

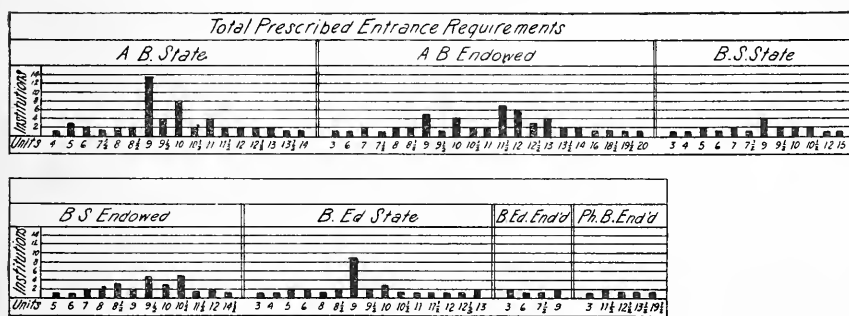
There are 12 different standards in a total of 21 instances for the B. S. degree (State).

There are 12 different standards in a total of 27 for the B. S. degree (endowed).

There are 15 different standards in a total of 30 instances for the B. Ed. degree (State).

There are 4 different standards in a total of 6 instances for the B. Ed. degree (endowed).

There are 6 different standards in a total of 7 for the Ph. B. degree (endowed).



GRAPH 6.

TABLE 14.—*Total elective entrance requirements for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
1	Delaware College.....	14	$\frac{1}{2}$	3.58
2	Rutgers College (N. J.).....	15	1	6.67
3	University of Vermont.....	14 $\frac{1}{2}$	1	6.99
4	University of Georgia.....	14	1 $\frac{1}{2}$	10.73
5	University of North Carolina (groups 1 and 2).....	14	1 $\frac{1}{2}$	12.87
6	University of Colorado.....	15	2	13.33
7	University of North Carolina (group 3).....	14	2 $\frac{1}{2}$	17.87
8	University of Florida.....	16	3	20
9	University of Kansas.....	15	3 $\frac{1}{2}$	23.34
10	University of Texas.....	14	3 $\frac{1}{2}$	25
11	University of Vermont.....	14	3 $\frac{1}{2}$	25
12	Pennsylvania State College.....	14	4	18.58
13	University of Porto Rico.....	16	4	25
14	Howard University (D. C.).....	15	4	26.67
15	Ohio State University.....	15	4	26.67
16	Ohio University.....	15	4	26.67
17	Cornell University.....	15	4	26.67
18	University of Maine.....	14 $\frac{1}{2}$	4	27.60
19	University of South Carolina.....	14	4	28.58
20	University of Wisconsin.....	14	4	28.58
21	University of Tennessee.....	14	4 $\frac{1}{2}$	32.15
22	College of William and Mary.....	14	4 $\frac{1}{2}$	32.15
23	University of California.....	15	5	33.33
24	University of Montana.....	15	5	33.33
25	University of Wyoming.....	15	5	33.33
26	University of Alabama.....	14	5	35.72
27	University of Arkansas.....	14	5	35.72
28	University of Kentucky.....	15	5 $\frac{1}{2}$	36.66
29	University of Arizona.....	15	5 $\frac{1}{2}$	36.66

TABLE 14.—*Total elective entrance requirements for the bachelor's degree—Continued.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
30	University of Louisiana.....	14	5½	39.31
31	University of Florida.....	16	6	37.50
32	University of California.....	15	6	40
33	University of Idaho.....	15	6	40
34	University of Minnesota.....	15	6	40
35	University of Nebraska.....	15	6	40
36	University of New Mexico.....	15	6	40
37	Miami University (Ohio).....	15	6	40
38	University of Oklahoma.....	15	6	40
39	University of Oregon.....	15	6	40
40	University of Washington.....	15	6	40
41	West Virginia University.....	15	6	40
42	State University of Iowa.....	15	6½	43.36
43	University of Mississippi.....	14	6½	46.44
44	Indiana University.....	16	7	43.75
45	University of Illinois.....	15	7	46.66
46	University of Michigan.....	15	7	46.66
47	University of Missouri.....	15	9	60
48	University of Utah.....	15	9	60
49	University of Nevada.....	15	10	66.66
50	University of South Dakota.....	15	10	66.66
51	State College of Washington.....	15	10	66.66
52	University of North Dakota.....	15	11	73.34

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Union University.....	14	½	3.58
2	Vassar College.....	15	1	6.66
3	Williams College.....	14½	1	6.91
4	Lafayette College.....	14½	1	6.91
5	Muhlenberg College.....	15	1½	10
6	Union University.....	14	1½	10.72
7	Randolph-Macon College.....	14	1½	10.73
8	Trinity College.....	15	2	13.37
9	Wells College.....	14½	2	13.87
10	Dartmouth College.....	14½	2	13.87
11	Hamilton College.....	14½	2	13.87
12	Washington University.....	15	2	16.67
13	Amherst College.....	14	2½	17.86
14	Colorado College.....	15	3	20
15	Oberlin College.....	15	3	20
16	Syracuse University.....	15	3	20
17	Brown University.....	14½	3	20.77
18	New York University.....	15	3½	23.33
19	Vanderbilt University.....	15	3½	23.33
20	Grinnell College.....	15	3½	23.33
21	Yale University.....	17	4	23.56
22	Trinity College.....	15	4	26.66
23	Wellesley College.....	15	4	26.66
24	Haverford College.....	14½	4	27.60
25	Smith College.....	14½	4	27.60
26	University of the South.....	14	4	28.58
27	Baker University.....	15	4½	30
28	Princeton University.....	16½	5	30.31
29	Harvard University.....	16½	5	30.31
30	Columbia University.....	15	5	33.33
31	Western Reserve University.....	15	5	33.33
32	Wesleyan College.....	14½	5	34.50
33	Bowdoin College.....	14½	5	34.50
34	University of Pennsylvania.....	14½	5	34.50
35	Beloit College.....	15	6	40
36	University of Chicago.....	15	6	40
37	Earlham College.....	15	6	40
38	Tulane University.....	15	6	40
39	De Pauw University.....	16	6½	41.63
40	Washington and Lee University.....	15	6½	43.34
41	Colgate University.....	15	6½	43.34
42	Tufts College.....	15	7	46.66
43	Northwestern University.....	15	7	46.66
44	Swarthmore College.....	14½	7	48.25
45	George Washington University.....	15	7½	50
46	Carleton College.....	15	8	53.34
47	University of Pittsburgh.....	15	9	60
48	Leland Stanford University.....	15	12	80

TABLE 14.—*Total elective entrance requirements for the bachelor's degree*—Continued.

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
1	University of Virginia.....	14	3½	25
2	University of Porto Rico.....	16	4	25
3	Howard University (D. C.).....	15	4	26.66
4	University of South Carolina.....	14	4	28.58
5	Delaware College.....	14	4½	32.16
6	College of William and Mary.....	14	4½	32.16
7	University of Vermont.....	14½	5	34.55
8	University of Arizona.....	15	5½	36.66
9	University of Kentucky.....	15	5½	36.66
10	University of Florida.....	16	6	37.50
11	University of Idaho.....	15	6	40
12	University of Nebraska.....	15	6	40
13	University of Mississippi.....	14	6½	46.40
14	University of Arkansas.....	14	7	50
15	University of Illinois.....	15	8	53.34
16	New Hampshire College.....	15	8	53.34
17	University of Alabama.....	14	8	57.18
18	University of Nevada.....	15	10	66.66
19	State College of Washington.....	15	10	66.66
20	University of North Dakota.....	15	11	73.33
21	College of Hawaii.....	15	12	80

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
1	Sycrause University.....	15	3	20
2	Tulane University.....	15	3	20
3	Hamilton College.....	14½	3	21.77
4	Randolph-Macon College.....	14	3½	25
5	Haverford College.....	14½	4	27.60
6	Dartmouth College.....	14½	4	27.60
7	University of the South.....	14	4	28.58
8	Union University.....	14	4	28.58
9	New York University.....	15	4½	30
10	Vanderbilt University.....	15	5	33.33
11	Lafayette College.....	14½	5	34.45
12	Grinnell College.....	15	5½	36.66
13	Muhlenburg College.....	15	5½	36.66
14	Harvard University.....	16½	6	36.37
15	Beloit College.....	15	6	40
16	Earlham College.....	15	6	40
17	Wesleyan University.....	14½	6	41.35
18	Bowdoin College.....	14½	6	41.35
19	Colgate University.....	15	6½	43.34
20	Princeton University.....	16½	7	42.43
21	Columbia University.....	15	7	46.66
22	Northwestern University.....	15	7	46.66
23	Carleton College.....	15	8	53.37
24	Tufts College.....	15	8	53.37
25	University of Pittsburgh.....	15	9	60
26	University of Chicago.....	15	10	66.66

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
1	University of Vermont.....	14½	1	6.99
2	University of North Carolina.....	15	1½	12.87
3	University of Colorado.....	15	2	13.33
4	Howard University (D. C.).....	15	3	20
5	University of Kansas.....	15	3½	23.34
6	University of Texas.....	14	3½	25
7	Ohio State University.....	15	4	26.66
8	University of South Carolina.....	14	4	28.58
9	University of Georgia.....	14	4½	32.15
10	University of Tennessee.....	14	4½	32.15
11	University of Wyoming.....	15	5	33.33
12	University of Alabama.....	14	5	35.72
13	University of Louisiana.....	14	5½	39.31

TABLE 14.—*Total elective entrance requirements for the bachelor's degree—Continued.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units required.	Total elective units.	Percent- age of elective units.
14	University of Florida.....	16	6	37.50
15	University of Idaho.....	15	6	40
16	University of Minnesota.....	15	6	40
17	University of New Mexico.....	15	6	40
18	University of Nebraska.....	15	6	40
19	Miami University (Ohio).....	15	6	40
20	University of Oregon.....	15	6	40
21	University of Oklahoma.....	15	6	40
22	University of Washington.....	15	6	40
23	State University of Iowa.....	15	6½	43.36
24	University of Michigan.....	15	7	46.67
25	University of Missouri.....	15	9	60
26	University of Utah.....	15	9	60
27	University of Arkansas.....	14	9	64.28
28	University of Nevada.....	15	10	66.67
29	University of North Dakota.....	15	11	73.34
30	University of Mississippi.....	14	11	78.58

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	15	6	40
2	Johns Hopkins University and Goucher College.....	15	6	40
3	George Washington University.....	15	7½	50
4	University of Pittsburgh.....	15	9	60
5	University of Chicago.....	15	12	80
6	Columbia University.....	15	12	80

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	14½	2	13.80
1	Rutgers College (N. J.) (for Litt. B.).....	15	1	6.66

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Union University (for Ph. B.).....	14	½	3.58
2	Lafayette College (for Ph. B.).....	14½	2	13.80
3	Hamilton College (for Ph. B.).....	14½	3	21.77
4	Muhlenberg College (for Ph. B.).....	15	3½	23.34
5	Brown University (for Ph. B.).....	14½	5	34.55
6	University of Chicago (for Ph. B.).....	15	12	80.00
1	Princeton University (for Litt. B.).....	16½	7	42.43

## TOTAL ELECTIVE ENTRANCE REQUIREMENTS.

All of the State schools allow elective work as a part of the entrance requirements for the A. B. degree, likewise all endowed schools with the exception of the Catholic University and Bryn Mawr College. These institutions prescribe the entire amount of entrance requirements.

All of the State and endowed schools allow elective entrance work for the other degrees with the exception of Rutgers College and the Catholic University, which prescribe the entire amount for the B. S. degree. The Catholic University prescribes the entire amount of entrance requirements for the Ph. B. degree also.

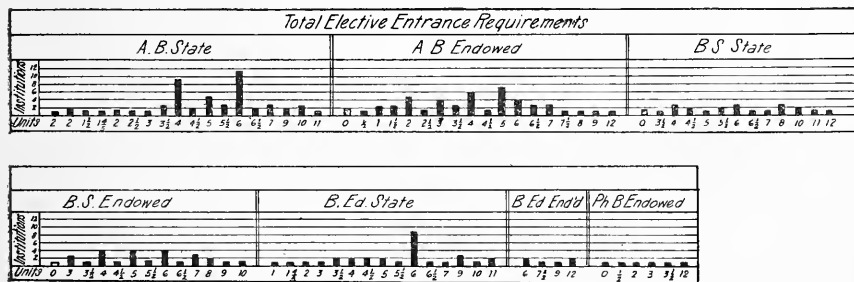
Table 14 shows the number of elective units permitted by the institutions of our list.

TABLE 15.—*Elective entrance requirements.*

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	$\frac{1}{2}$	11	5.17	34.54	5	35.72	6	40
A. B. (endowed).....	$\frac{1}{2}$	12	4.32	28.98	4	27.56	5	30.31 to 33.33
B. S. (State).....	$3\frac{1}{2}$	13	7.45	45.25	6	37.50	$\left\{ \begin{array}{l} 4-6 \\ 8 \end{array} \right\}$	25 to 57
B. S. (endowed).....	3	10	5.38	36.23	5	34.45	$\left\{ \begin{array}{l} 4-5 \\ 6 \end{array} \right\}$	27.5 to 41.78
B. Ed. (State).....	1	11	5.79	39.32	6	40	6	40
B. Ed. (endowed).....	6	12	8.75	58.33	$8\frac{1}{2}$	55	6-12	40, 80
Ph. B. (State).....	(2)	(2)	(2)	.....	(2)	.....	(2)	.....
Ph. B. (endowed).....	$\frac{1}{2}$	12	4.2	28.49	$3\frac{1}{2}$	22.55	None.	None.
Litt. B. (State).....	(1)	(1)	(1)	(6.66)	(1)	(6.66)	(1)	(6.66)
Litt. B. (endowed).....	(7)	(7)	(7)	(42.43)	(7)	(42.43)	(7)	(42.43)
General average.....	.....	.....	5.40	35.74	.....	.....	.....	.....

The foregoing table shows, in harmony with Table 14, that the endowed schools allow less freedom of election to the extent of at least 1 unit on the average, than the State schools. That is true for the A. B. and B. S. degrees. For the B. Ed. degree, however, the endowed schools are more flexible than the State schools in this respect.

Graph 7 shows that 4 units and 6 units slightly predominate for the A. B. (State), while 4 units and 5 units predominate for the A. B. (endowed).



GRAPH 7.

TABLE 16.—*Total entrance requirements for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units.
1	University of Alabama.....	14
2	University of Arkansas.....	14
3	Delaware College.....	14
4	University of Georgia.....	14
5	University of Louisiana.....	14
6	University of Mississippi.....	14
7	University of North Carolina.....	14
8	Pennsylvania State College.....	14
9	University of South Carolina.....	14
10	University of Tennessee.....	14
11	University of Texas.....	14
12	University of Virginia.....	14
13	College of William and Mary.....	14
14	University of Wisconsin.....	14
15	University of Maine.....	14½
16	University of Vermont.....	14½
17	University of Arizona.....	15
18	University of California.....	15
19	University of Colorado.....	15
20	Howard University (D. C.).....	15
21	University of Idaho.....	15
22	University of Illinois.....	15
23	State University of Iowa.....	15
24	University of Kansas.....	15
25	University of Kentucky.....	15
26	University of Michigan.....	15
27	University of Minnesota.....	15
28	University of Missouri.....	15
29	University of Montana.....	15
30	University of Nebraska.....	15
31	Rutgers College (N. J.).....	15
32	University of New Mexico.....	15
33	Cornell University (N. Y.).....	15
34	University of Nevada.....	15
35	University of North Dakota.....	15
36	Ohio State University.....	15
37	Ohio University.....	15
38	Miami University (Ohio).....	15
39	University of Oklahoma.....	15
40	University of Oregon.....	15
41	University of South Dakota.....	15
42	University of Utah.....	15
43	University of Washington.....	15
44	State College of Washington.....	15
45	West Virginia University.....	15
46	University of Wyoming.....	15
47	University of Florida.....	16
48	Indiana University.....	16
49	University of Porto Rico.....	16

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units.
1	Amherst College.....	14
2	Randolph-Macon College.....	14
3	University of the South.....	14
4	Union University.....	14
5	Bowdoin College.....	14½
6	Brown University.....	14½
7	Dartmouth College.....	14½
8	Hamilton College.....	14½
9	Haverford College.....	14½
10	John Hopkins University.....	14½
11	Lafayette College.....	14½
12	University of Pennsylvania.....	14½
13	Smith College.....	14½
14	Swarthmore College.....	14½
15	Wells College.....	14½
16	Wesleyan College.....	14½
17	Williams College.....	14½
18	Baker University.....	15
19	Beloit College.....	15
20	Carleton College.....	15
21	Colgate University.....	15
22	University of Chicago.....	15



TABLE 16.—*Total entrance requirements for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units.
23	Colorado College.....	15
24	Columbia University.....	15
25	Earlham College.....	15
26	George Washington University.....	15
27	Goucher College.....	15
28	Grinnell College.....	15
29	Leland Stanford University.....	15
30	Muhlenburg College.....	15
31	New York University.....	15
32	Northwestern University.....	15
33	Oberlin College.....	15
34	University of Pittsburgh.....	15
35	Syracuse University.....	15
36	Trinity College (N. C.).....	15
37	Tufts College.....	15
38	Tulane University.....	15
39	Vanderbilt University.....	15
40	Vassar College.....	15
41	Washington University (St. Louis).....	15
42	Washington and Lee University.....	15
43	Wellesley College.....	15
44	Western Reserve University.....	15
45	De Pauw University.....	16
46	Catholic University of America (school of letters).....	16
47	Harvard University.....	16½
48	Princeton University.....	16½
49	Yale University.....	17
50	Catholic University of America (school of sciences).....	18½
51	Catholic University of America (school of philosophy).....	19½
52	Bryn Mawr College.....	20

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Alabama.....	14
2	University of Arkansas.....	14
3	Delaware College.....	14
4	University of Mississippi.....	14
5	University of South Carolina.....	14
6	University of Virginia.....	14
7	College of William and Mary.....	14
8	University of Vermont.....	14½
9	University of Arizona.....	15
10	Howard University (D. C.).....	15
11	College of Hawaii.....	15
12	University of Idaho.....	15
13	University of Illinois.....	15
14	University of Kentucky.....	15
15	University of Nebraska.....	15
16	New Hampshire College.....	15
17	Rutgers College (N. J.).....	15
18	University of Nevada.....	15
19	University of North Dakota.....	15
20	State College of Washington.....	15
21	University of Florida.....	16
22	University of Porto Rico.....	16

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Randolph-Macon College.....	14
2	University of the South.....	14
3	Union University.....	14
4	Bowdoin College.....	14½
5	Catholic University of America.....	14½
6	Dartmouth College.....	14½
7	Hamilton College.....	14½
8	Haverford College.....	14½
9	Lafayette College.....	14½
10	Wesleyan University.....	14½
11	Beloit College.....	15
12	Carleton College.....	15
13	University of Chicago.....	15

TABLE 16.—*Total entrance requirements for the bachelor's degree—Continued.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total entrance units.
14	Colgate University.....	15
15	Columbia University.....	15
16	Earlham College.....	15
17	Grinnell College.....	15
18	Muhlenberg College.....	15
19	New York University.....	15
20	Northwestern University.....	15
21	University of Pittsburgh.....	15
22	Syracuse University.....	15
23	Tufts College.....	15
24	Tulane University.....	15
25	Vanderbilt University.....	15
26	Harvard University.....	16½
27	Princeton University.....	16½

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Alabama.....	14
2	University of Arkansas.....	14
3	University of Georgia.....	14
4	University of Louisiana.....	14
5	University of Mississippi.....	14
6	University of North Carolina.....	14
7	University of South Carolina.....	14
8	University of Tennessee.....	14
9	University of Texas.....	14
10	University of Vermont.....	14½
11	University of Colorado.....	15
12	Howard University (D. C.).....	15
13	University of Idaho.....	15
14	State University of Iowa.....	15
15	University of Kansas.....	15
16	University of Michigan.....	15
17	University of Minnesota.....	15
18	University of Missouri.....	15
19	University of New Mexico.....	15
20	University of Nebraska.....	15
21	University of Nevada.....	15
22	University of North Dakota.....	15
23	Ohio State University.....	15
24	Miami University (Ohio).....	15
25	University of Oregon.....	15
26	University of Oklahoma.....	15
27	University of Utah.....	15
28	University of Washington.....	15
29	University of Wyoming.....	15
30	University of Florida.....	16

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	15
2	Columbia University.....	15
3	George Washington University.....	15
4	Johns Hopkins University and Goucher College.....	15
5	University of Pittsburgh.....	15
6	Tulane University.....	15

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	14½
1	Rutgers College (N. J.) (for Litt. B.).....	15

TABLE 16.—*Total entrance requirements for the bachelor's degree—Continued.*

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total entrance units.
1	Union University (for Ph. B.).....	14
2	Hamilton College (for Ph. B.).....	14½
3	Lafayette College (for Ph. B.).....	14½
4	Brown University (for Ph. B.).....	14½
5	Muhlenberg College (for Ph. B.).....	15
6	University of Chicago (for Ph. B.).....	15
7	Catholic University of America (for Ph. B.).....	19½
1	Princeton University (for Litt. B.).....	16½

## TOTAL ENTRANCE REQUIREMENTS.

The total number of units required for entrance by the colleges and universities in our list varies from 14 to 20. (*See Table 16.*)

According to Table 17 and Graph 8, 15 units is the mode for both State and endowed schools. For entrance to the A. B. courses nearly one-third of the 50 State universities require 14 units, while only 4 of the 50 endowed schools require this number. On the other hand, nearly one-third of the 50 endowed schools prescribe 14½ units while only two State institutions make a similar requirement.

The tendencies shown for the A. B. degree are correspondingly true for the B. S. degree of State and endowed schools.

While 14 units are required for entrance by nearly a fourth of the State schools for the degrees in education, yet 15 units is the dominant requirement in both State and endowed schools.

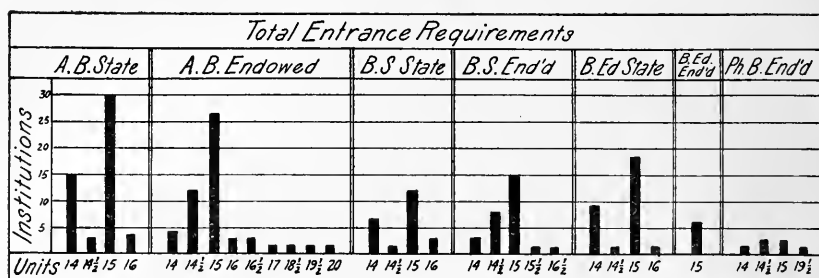
The Ph. B. and Litt. B. degrees show little deviation from 14½ or 15 units.

TABLE 17.—*Total entrance requirements.*

Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
A. B. (State).....	14	16	14.73	15	15
A. B. (endowed)....	14	20	15.17	15	15
B. S. (State).....	14	16	15.11	15	15
B. S. (endowed)....	14	16½	14.82	15	15
B. Ed. (State).....	14	16	14.71	15	15
B. Ed. (endowed)....	15	15	15.00	15	15
Ph. B. (State).....	(14½)	(14½)	(14.50)	(14½)	(14½)
Ph. B. (endowed)....	14	16½	16.01	14½	14½
Litt. B. (State).....	(15)	(15)	(15)	(15)	(15)
Litt. B. (endowed)....	(16½)	(16½)	(16½)	(16½)	(16½)
General average.....			14.86		

The average for the Ph. B. degree (endowed schools) is from 0.90 to 1.28 units higher than those of the A. B. degree, both State and endowed.

The entrance requirement of Princeton for the Litt. B. degree is higher than the average requirement for any other degree.



GRAPH 8.

The institutions which prescribe more than 15 units are here given:

*Institutions prescribing more than 15 units.*

A. B. (STATE).

Florida, Indiana, and Porto Rico, 16 units.

B. S. (STATE).

Florida and Porto Rico, 16 units.

B. ED. (STATE).

Florida, 16 units.

PH. B. (STATE).

None.

LITT. B. (STATE).

None.

A. B. (ENDOWED).

De Pauw and Catholic, 16 units.  
Harvard and Princeton, 16½ units.  
Yale, 17 units.  
Catholic (school of science) 18½ units.  
Catholic (school of philosophy) 19½ units.  
Bryn Mawr, 20 units.

B. S. (ENDOWED).

Harvard, 16½ units.  
Princeton, 16½ units.

B. ED. (ENDOWED).

None.

PH. B. (ENDOWED).

Catholic, 19½ units.

LITT. B. (ENDOWED).

Princeton, 16½ units.

*The mode.*

## TOTAL ENTRANCE REQUIREMENTS.

Degrees.	Number of schools requiring 15 units.	Number of schools requiring 14½ units.	Number of schools requiring 14 units.	Total number of cases.
A. B. (State).....	30	2	15	49
A. B. (endowed).....	27	13	4	51
B. S. (State).....	12	1	7	23
B. S. (endowed).....	15	8	3	27
B. Ed. (State).....	19	1	9	30
B. Ed. (endowed).....	6	0	0	6
Ph. B. (State).....	0	1	0	1
Ph. B. (endowed).....	2	2	1	7
Litt. B. (State).....	1	0	0	1
Litt. B. (endowed).....	0	0	0	1
Total.....	112	28	39	196

In 112 out of 196 cases (57.4 per cent), 15 units are prescribed for the total entrance requirements for the bachelor's degree. Twenty-eight schools (14.4 per cent) prescribe 14½ units. Thirty-nine schools (20 per cent) prescribe 14 units.

*Summary of frequencies—total entrance requirements.*

## A. B. (STATE).

15 require 14 entrance units.  
2 require 14½ entrance units.  
30 require 15 entrance units.  
3 require 16 entrance units.

## B. S. (STATE).

7 require 14 entrance units.  
1 requires 14½ entrance units.  
19 require 15 entrance units.  
1 requires 16 entrance units.

## B. ED., ETC. (STATE).

9 require 14 entrance units.  
1 requires 14½ entrance units.  
19 require 15 entrance units.  
1 requires 16 entrance units.

## PH. B. (STATE).

1 requires 14½ entrance units.

## LITT. B. (STATE).

1 requires 15 entrance units.

## A. B. (ENDOWED).

4 require 14 entrance units.  
13 require 14½ entrance units.  
27 require 15 entrance units.  
2 require 16 entrance units.  
2 require 16½ entrance units.  
1 requires 17 entrance units.  
1 requires 18½ entrance units.  
1 requires 19½ entrance units.  
1 requires 20 entrance units.

## B. S. (ENDOWED).

3 require 14 entrance units.  
8 require 14½ entrance units.  
15 require 15 entrance units.  
2 require 16½ entrance units.

## B. ED., ETC. (ENDOWED).

6 require 15 entrance units.

## PH. B. (ENDOWED).

1 requires 14 entrance units.  
2 require 14½ entrance units.  
2 require 15 entrance units.  
1 requires 19½ entrance units.

## LITT. B. (ENDOWED).

1 requires 16½ entrance units.

## THE ELECTIVES OF COLLEGE ENTRANCE REQUIREMENTS.

*Types of elective units.*—Entrance electives may be classified as follows: (a) Free electives; (b) semielectives or restricted electives; and (c) group, or degree electives.

The free electives are usually chosen without serious restrictions from an approved list of secondary school subjects. Some guidance in making the electives may be expected from the professor or the department to which the subject belongs in order to insure proper distribution and concentration.

The semielective is chosen from a more limited number of subjects, usually two or three. In this discussion the term "optional" refers to a choice between two or more courses of the same type or group, as between French and German or American history and civil government, while the semielective refers to a choice between entirely different subjects, as between language and science or English and mathematics. The latter type of elective serves the purpose of distribution and concentration with respect to different college curricula. The following institutions offer semielectives as part of the entrance requirements: Idaho, Indiana, Rutgers (N. J.), Baker, Brown, Carleton, Columbia, Haverford, Leland Stanford, Tulane, Vanderbilt, and Vassar.

*Semielectives (State institutions).*—1. The University of Idaho states that "additional academic units must be added to any of the above—i. e., English, foreign language, history, science, mathematics—except English, so as to afford at least one subject besides English, which totals 3 units." (Concentration.)<sup>1</sup>

2. The University of Indiana prescribes "two additional units to be chosen from the above-mentioned subjects." (English, foreign language, history, science, mathematics.) (Concentration.)

3. Rutgers College (N. J.) allows the student to substitute one unit of science for one of the two prescribed units of history. (Distribution.)<sup>1</sup>

*Semielectives (endowed institutions).*—1. Baker University requires a semielective to be chosen from groups 1 to 5 to the extent of three units. (Concentration.)

2. Brown University requires four units to be chosen from chemistry, physics, or languages other than English. This is only for the B. S. degree. (Concentration, primarily.)

3. Carleton College states that "two series of two units each to the extent of four units must be added from the following groups of subjects: Foreign languages, history, and social sciences, natural sciences, and mathematics." (Concentration.)

<sup>1</sup> The terms concentration or distribution indicate the function of the semielective.

4. Columbia University adds two units of intermediate or advanced subjects from group 1 of the elective subjects (seven subjects). (Concentration.)

5. Haverford College requires one language out of the four units of free electives. (Concentration.)

6. Leland Stanford combines 12 units of semielectives and free electives, as follows:

No prescription other than English is made. Candidates desiring to study mathematics must obviously offer such elementary mathematics as is not taught by the university, and engineering students are expected to offer also solid geometry and trigonometry. Candidates desiring to study Latin should offer at least two entrance units in that subject. (Distribution or concentration.)

7. Tulane University of Louisiana preparatory to the A. B. course has for semielective units "either Greek, history, or science to the extent of two units in addition to three prescribed subjects." (Concentration or distribution.)

8. Vanderbilt University requires a semielective for the B. S. course to the extent of two units chosen from history or science. (Distribution.)

9. Vassar College requires from one to two units selected from a third foreign language, or a science, or American history. (Concentration.)

*The group systems of the elective units.*—The growth of subject matter in the last 25 years has made the administration of the secondary school curricula more complicated and unwieldy. It has been found convenient, in view of the numerous subjects which command secondary school credit, to divide these subjects into groups, the more common ones being English, foreign language, mathematics, science, and history. In some cases the prescribed units are considered as one group and the electives the other group. Some of the smaller institutions where the list of entrance subjects is limited also use the group system, while in certain large institutions the long list of electives is not organized into groups.

*The group system and entrance electives.*—Ten State and nine endowed institutions have the electives of the entrance requirements divided into groups. In addition to these three State schools combine the prescribed and elective subjects into groups, the prescribed subjects forming one group and the electives two or more groups. Three endowed schools include the prescribed subjects with the electives in the group system.

The degree or core groups, which usually contain both prescribed and elective subjects, are found in 13 State institutions and 22 endowed schools.

*Institutions with elective degree or core entrance groups.*

## STATE.

*Special degree entrance groups.*

1. Alabama.....A. B. and B. S.
2. Arkansas.....A. B. and B. S.
3. Delaware.....A. B. and B. S.
4. Florida.....A. B. and B. S.
5. Illinois.....A. B. and B. S.
6. Rutgers.....A. B., B. Litt., B. S.
7. Vermont.....A. B., Ph. B., B. S.
8. Howard.....A. B. and B. S.

## ENDOWED.

1. Bowdoin.....A. B. and B. S.
2. Brown.....A. B., Ph. B., B. S.
3. Colgate.....A. B. and B. S.
4. Columbia.....A. B. and B. S.
5. Grinnell.....A. B. and B. S.
6. Harvard.....A. B. and B. S.
7. Hamilton.....A. B., Ph. B., B. S.
8. Hawaii.....A. B. and B. S.
9. Haverford.....A. B. and B. S.
10. Lafayette.....A. B., Ph. B., B. S.
11. Muhlenberg.....A. B., Ph. B., B. S.
12. New York.....A. B. and B. S.
13. Princeton....A. B., B. S., or Litt. B.

## ENDOWED—Continued.

14. Randolph-Macon....A. B. and B. S.
15. Univ. of the South...A. B. and B. S.
16. Syracuse.....A. B. and B. S.
17. Tulane.....A. B. and B. S.
18. Union.....A. B., Ph. B., B. S.
19. Vanderbilt.....A. B. and B. S.

*Special core groups for A. B. only.*

1. California, plan A, plan B.
2. North Carolina, groups 1, 2, and 3.
3. Miami, requirements A and B.
1. Trinity, groups A and B.
2. Williams, groups 1 to 5.

*Special educational degree groups.*

1. Arkansas.
2. Georgia.
3. Mississippi.
4. Columbia.

\* \* \*

The Catholic University has a distinct general requirement for each of the three schools—the school of philosophy, the school of letters, and the school of science.

*Other group arrangements.*—The vocational subjects form a distinct group in four of the institutions whose elective groups are not more than three in number. The vocational group is not found where there are four or more elective groups.

Five institutions combine the prescribed and elective subjects into group organizations. The tendency is to group as follows: A prescribed subject group of literary subjects, an elective group of literary subjects, and an elective group of nonliterary or vocational subjects. Hamilton College and Wellesley College have elective groups of special interest.

*Credit allowed for vocational electives.*—Vocational subjects are elective except in the University of Porto Rico, where 2 units in industrial subjects is prescribed. The following summary shows the number of units which may be elected in vocational subjects in 19 State and 2 endowed colleges:

Amount of credit.	Institution.	Number of schools.
2 units.....	North Carolina.....	1
3 units.....	Georgia, Illinois, Kansas, Michigan, Mississippi, Tennessee.....	6
4 units.....	Arkansas, Minnesota, Missouri, New Hampshire, New Mexico, Ohio State, Miami, Oregon, South Dakota, Washington, Wisconsin(State schools), 11; also Pittsburgh and Columbia (endowed), 2.	13
6 units.....	Montana.....	1



## DISTRIBUTION OF ENTRANCE REQUIREMENTS.

Not many decades have passed since the studies offered by public and private high schools were so few that little or no election was possible. Today the number of subjects offered by many high schools reaches at least 60.

The college list of accepted entrance subjects has also greatly increased, owing in part to the influence of the secondary schools and in part to the college curricula. The number of acceptable units listed by universities and colleges of the United States varies approximately from 25 to 50. One of the most complete and representative lists of accepted entrance subjects is that of the University of Pennsylvania. A glance at the list of 49 preparatory studies shows the need of the methods of selection and control, such as dividing the entrance subjects into prescribed subjects, semielectives, group electives, and free electives.

Subject.	<i>Subjects accepted for admission.</i>	Units.
English A—Grammar and composition .....		1½
English B—General and specific reading .....		1½
English—Extra .....		1
Mathematics A1—Algebra to quadratics .....		1
Mathematics A2—Algebra, quadratics and beyond .....		½
Mathematics B—Higher algebra .....		½
Mathematics C—Plane geometry .....		1
Mathematics D—Solid geometry .....		½
Mathematics E—Rudiments of plane trigonometry .....		0
Mathematics F—Plane trigonometry .....		½
History A—Ancient .....	1 ½ or 1	
History B—Medieval and modern .....	1 ½ or 1	
History C—English .....	1 ½ or 1	
History D—American history and civil government <sup>2</sup> .....	1 ½ or 1	
Civil government <sup>2</sup> .....	1 ½ or 1	
Latin A—Grammar and elementary prose composition <sup>3</sup> .....		1
Latin B—Cæsar and elementary sight translation of prose .....		1
Latin C—Cicero and advanced sight translation of prose .....	}	1
Latin L—Advanced prose composition .....		
Latin D—Vergil and sight translation of poetry .....		1
Greek B—Xenophon, Anabasis, Books I–IV <sup>3</sup> .....		1
Greek F—Prose composition .....		½
Greek G—Sight translation of prose .....		½
Greek C—Homer, Illiad, Books I–III .....		1
German A—Elementary German .....		2
German B—Intermediate German .....		1
German C—Advanced German .....		1
French A—Elementary French <sup>3</sup> .....		2
French B—Intermediate French .....		1

<sup>1</sup> Either ½ or 1 unit may be granted upon school record. The entrance examination in this subject will cover the preparation necessary for 1 full unit.

<sup>2</sup> History D and civil government may, at most, count 1½ units.

<sup>3</sup> Not less than 2 unit of a foreign language will be accepted.

*Subjects accepted for admission.*

Subjects.	Units.
French C—Advanced French.....	1
Spanish A—Elementary Spanish <sup>1</sup> .....	2
Spanish B—Intermediate Spanish.....	1
Italian A—Elementary Italian <sup>1</sup> .....	2
Italian B—Intermediate Italian.....	1
Physics A—Elementary physics without laboratory work.....	$\frac{1}{2}$
Physics B—Elementary physics with laboratory work.....	1
Chemistry.....	1
Botany.....	$2\frac{1}{2}$ or 1
Zoology.....	$2\frac{1}{2}$ or 1
Biology.....	1
Physiology.....	$2\frac{1}{2}$ or 1
Physical geography or physiography.....	$2\frac{1}{2}$ or 1
Geology.....	$2\frac{1}{2}$ or 1
Astronomy.....	$2\frac{1}{2}$ or 1
Economics.....	$2\frac{1}{2}$ or 1
Business law.....	$2\frac{1}{2}$ or 1
Commercial geography.....	$2\frac{1}{2}$ or 1
Drawing.....	$2\frac{1}{2}$ or 1
Manual training.....	$2\frac{1}{2}$ or 1

TABLE 18.—*Distribution of prescribed entrance subjects.*

## A. B. DEGREE.

## INSTITUTIONS PRESCRIBING ONE SUBJECT.

		English.	Language.	History.	Science.	Mathematics.
	<i>Endowed.</i>					
1	Chicago.....	E.				
2	Leland Stanford.....	E.				

## INSTITUTIONS PRESCRIBING TWO SUBJECTS.

	<i>State.</i>					
1	Nevada.....	E.				M.
2	North Dakota.....	E.				M.
3	South Dakota.....	E.				M.
4	Washington State.....	E.				M.

## INSTITUTIONS PRESCRIBING THREE SUBJECTS.

	<i>State.</i>					
1	Alabama.....	E.	L.			M.
2	Wisconsin.....	E.	L.			M.
3	Missouri.....	E.	L.			M.
4	Tennessee.....	E.	L.			M.
5	Minnesota.....	E.	L.			M.
6	Utah.....			H.		M.
7	Mississippi.....	E.		H.		M.

<sup>1</sup> Not less than 2 units of a foreign language will be accepted.<sup>2</sup> Either  $\frac{1}{2}$  or 1 unit may be granted upon school record. The entrance examination in this subject will cover the preparation necessary for 1 full unit.

TABLE 18.—*Distribution of prescribed entrance subjects—Continued.*

## A. B. DEGREE—continued.

## INSTITUTIONS PRESCRIBING THREE SUBJECTS—continued.

		English.	Language.	History.	Science.	Mathematics.
	<i>Endowed.</i>					
1	Carleton.....	E.	L.	.....	.....	M.
2	Colgate.....	E.	L.	.....	.....	M.
3	Columbia.....	E.	L.	.....	.....	M.
4	George Washington.....	E.	L.	.....	.....	M.
5	Muhlenburg.....	E.	L.	.....	.....	M.
6	New York.....	E.	L.	.....	.....	M.
7	Northwestern.....	E.	L.	.....	.....	M.
8	Princeton.....	E.	L.	.....	.....	M.
9	University of the South.....	E.	L.	.....	.....	M.
10	Tulane.....	E.	L.	.....	.....	M.
11	Union.....	E.	L.	.....	.....	M.
12	Vanderbilt.....	E.	L.	.....	.....	M.
13	Western Reserve.....	E.	L.	.....	.....	M.
14	Yale.....	E.	L.	.....	.....	M.
15	Pittsburgh.....	E.	.....	H.	.....	M.
16	Swarthmore.....	E.	.....	H.	.....	M.

## INSTITUTIONS PRESCRIBING FOUR SUBJECTS.

	<i>State.</i>					
1	Arkansas.....	E.	L.	H.	.....	M.
2	Howard (D. C.).....	E.	L.	H.	.....	M.
3	Georgia.....	E.	L.	H.	.....	M.
4	Iowa.....	E.	L.	H.	.....	M.
5	Louisiana.....	E.	L.	H.	.....	M.
6	Maine.....	E.	L.	H.	.....	M.
7	Rutgers (N. J.).....	E.	L.	H.	.....	M.
8	Cornell (N. Y.).....	E.	L.	H.	.....	M.
9	North Carolina.....	E.	L.	H.	.....	M.
10	Pennsylvania State.....	E.	L.	H.	.....	M.
11	Texas.....	E.	L.	H.	.....	M.
12	Vermont.....	E.	L.	H.	.....	M.
13	Virginia.....	E.	L.	H.	.....	M.
14	William and Mary.....	E.	L.	H.	.....	M.
15	Illinois.....	E.	L.	.....	S.	M.
16	Michigan.....	E.	L.	.....	S.	M.
17	South Carolina.....	E.	.....	H.	S.	M.
	<i>Endowed.</i>					
1	Amherst.....	E.	L.	H.	.....	M.
2	Bowdoin.....	E.	L.	H.	.....	M.
3	Brown.....	E.	L.	H.	.....	M.
4	Dartmouth.....	E.	L.	H.	.....	M.
5	De Pauw.....	E.	L.	H.	.....	M.
6	Hamilton.....	E.	L.	H.	.....	M.
7	Haverford.....	E.	L.	H.	.....	M.
8	Lafayette.....	E.	L.	H.	.....	M.
9	Pennsylvania.....	E.	L.	H.	.....	M.
10	Randolph-Macon.....	E.	L.	H.	.....	M.
11	Smith.....	E.	L.	H.	.....	M.
12	Trinity.....	E.	L.	H.	.....	M.
13	Tufts.....	E.	L.	H.	.....	M.
14	Vassar.....	E.	L.	H.	.....	M.
15	Washington and Lee.....	E.	L.	H.	.....	M.
16	Wellesley.....	E.	L.	H.	.....	M.
17	Wells.....	E.	L.	H.	.....	M.
18	Wesleyan.....	E.	L.	H.	.....	M.
19	Williams.....	E.	L.	H.	.....	M.

TABLE 18.—*Distribution of prescribed entrance subjects—Continued.*

## A. B. DEGREE—continued.

## INSTITUTIONS PRESCRIBING FIVE SUBJECTS.

		English.	Language.	History.	Science.	Mathematics.
	<i>State.</i>					
1	Arizona.....	E.	L.	H.	S.	M.
2	California.....	E.	L.	H.	S.	M.
3	Colorado.....	E.	L.	H.	S.	M.
4	Delaware.....	E.	L.	H.	S.	M.
5	Florida.....	E.	L.	H.	S.	M.
6	Idaho.....	E.	L.	H.	S.	M.
7	Indiana.....	E.	L.	H.	S.	M.
8	Kansas.....	E.	L.	H.	S.	M.
9	Kentucky.....	E.	L.	H.	S.	M.
10	Montana.....	E.	L.	H.	S.	M.
11	Nebraska.....	E.	L.	H.	S.	M.
12	New Mexico.....	E.	L.	H.	S.	M.
13	Ohio State University.....	E.	L.	H.	S.	M.
14	Ohio.....	E.	L.	H.	S.	M.
15	Miami (Ohio).....	E.	L.	H.	S.	M.
16	Oklahoma.....	E.	L.	H.	S.	M.
17	Oregon.....	E.	L.	H.	S.	M.
18	Washington.....	E.	L.	H.	S.	M.
19	West Virginia.....	E.	L.	H.	S.	M.
20	Wyoming.....	E.	L.	H.	S.	M.
	<i>Endowed.</i>					
1	Baker.....	E.	L.	H.	S.	M.
2	Beloit.....	E.	L.	H.	S.	M.
3	Bryn Mawr.....	E.	L.	H.	S.	M.
4	Catholic.....	E.	L.	H.	S.	M.
5	Colorado.....	E.	L.	H.	S.	M.
6	Earlham.....	E.	L.	H.	S.	M.
7	Grinnell.....	E.	L.	H.	S.	M.
8	Harvard.....	E.	L.	H.	S.	M.
9	Johns Hopkins.....	E.	L.	H.	S.	M.
10	Oberlin.....	E.	L.	H.	S.	M.
11	Syracuse.....	E.	L.	H.	S.	M.
12	Washington.....	E.	L.	H.	S.	M.

## INSTITUTION PRESCRIBING SIX SUBJECTS.

	<i>State.</i>	E.	L.	H.	S.	M.
1	Porto Rico <sup>1</sup> .....	E.	L.	H.	S.	M.

## B. S. DEGREE.

## INSTITUTIONS PRESCRIBING ONE SUBJECT.

	<i>State.</i>	E.				
1	Hawaii.....	E.				
	<i>Endowed.</i>					
1	Chicago.....	E.				

## INSTITUTIONS PRESCRIBING TWO SUBJECTS.

	<i>State.</i>	E.				
1	Alabama.....	E.				M.
2	Nevada.....	E.				M.
3	North Dakota.....	E.				M.
4	Washington State.....	E.				M.

<sup>1</sup> Also industries.

TABLE 18.—*Distribution of prescribed entrance subjects—Continued.*

## B. S. DEGREE—continued.

## INSTITUTIONS PRESCRIBING THREE SUBJECTS.

		English.	Language.	History.	Science.	Mathematics.
	<i>State.</i>					
1	Illinois.....	E.	.....	.....	S.	M.
	<i>Endowed.</i>					
1	Carleton.....	E.	L.	.....	.....	M.
2	Colgate.....	E.	L.	.....	.....	M.
3	Northwestern.....	E.	L.	.....	.....	M.
4	Princeton.....	E.	L.	.....	.....	M.
5	South, University of the.....	E.	L.	.....	.....	M.
6	Vanderbilt.....	E.	L.	.....	.....	M.
7	Pittsburgh.....	E.	.....	H.	.....	M.
8	Columbia.....	E.	.....	.....	S.	M.

## INSTITUTIONS PRESCRIBING FOUR SUBJECTS.

	<i>State.</i>					
1	Virginia.....	E.	L.	H.	.....	M.
2	Arkansas.....	E.	.....	H.	S.	M.
3	New Hampshire.....	E.	.....	H.	S.	M.
4	South Carolina.....	E.	.....	H.	S.	M.
5	Michigan.....	E.	L.	.....	S.	M.
	<i>Endowed.</i>					
1	Bowdoin.....	E.	L.	H.	.....	M.
2	Brown.....	E.	L.	H.	.....	M.
3	Hamilton.....	E.	L.	H.	.....	M.
4	Haverford.....	E.	L.	H.	.....	M.
5	Tufts.....	E.	L.	H.	.....	M.
6	Wesleyan.....	E.	L.	H.	.....	M.
7	Randolph-Macon.....	E.	L.	H.	.....	M.
8	Muhlenburg.....	E.	L.	.....	S.	M.
9	New York.....	E.	L.	.....	S.	M.

## INSTITUTIONS PRESCRIBING FIVE SUBJECTS.

	<i>State.</i>					
1	Arizona.....	E.	L.	H.	S.	M.
2	Delaware.....	E.	L.	H.	S.	M.
3	Howard (D. C.).....	E.	L.	H.	S.	M.
4	Florida.....	E.	L.	H.	S.	M.
5	Idaho.....	E.	L.	H.	S.	M.
6	Kansas.....	E.	L.	H.	S.	M.
7	Kentucky.....	E.	L.	H.	S.	M.
8	Nebraska.....	E.	L.	H.	S.	M.
9	Rutgers (N. J.).....	E.	L.	H.	S.	M.
10	Vermont.....	E.	L.	H.	S.	M.
11	William and Mary.....	E.	L.	H.	S.	M.
	<i>Endowed.</i>					
1	Beloit.....	E.	L.	H.	S.	M.
2	Catholic.....	E.	L.	H.	S.	M.
3	Dartmouth.....	E.	L.	H.	S.	M.
4	Earlham.....	E.	L.	H.	S.	M.
5	Grinnell.....	E.	L.	H.	S.	M.
6	Harvard.....	E.	L.	H.	S.	M.
7	Lafayette.....	E.	L.	H.	S.	M.
8	Syracuse.....	E.	L.	H.	S.	M.
9	Tulane.....	E.	L.	H.	S.	M.
10	Union.....	E.	L.	H.	S.	M.

## INSTITUTION PRESCRIBING SIX SUBJECTS.

	<i>State.</i>					
1	Porto Rico <sup>1</sup> .....	E.	L.	H.	S.	M.

<sup>1</sup> Also industries.

TABLE 18.—*Distribution of prescribed entrance subjects—Continued.*

## PH. B. DEGREE.

## INSTITUTION PRESCRIBING ONE SUBJECT.

		English.	Language.	History.	Science.	Mathematics.
1	<i>Endowed.</i> Chicago.....	E.				

## INSTITUTIONS PRESCRIBING FOUR SUBJECTS.

1	<i>State.</i> Vermont.....	E.	L.	H.		M.
1	<i>Endowed.</i> Muhlenburg.....	E.	L.	H.		M.
2	Union.....	E.	L.	H.		M.

## INSTITUTIONS PRESCRIBING FIVE SUBJECTS.

1	<i>Endowed.</i> Catholic.....	E.	L.	H.	S.	M.
2	Lafayette.....	E.	L.	H.	S.	M.

## LITT. B. DEGREE.

## INSTITUTIONS PRESCRIBING THREE SUBJECTS.

1	<i>Endowed.</i> Princeton.....	E.	L.			M.
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## INSTITUTIONS PRESCRIBING FOUR SUBJECTS.

1	<i>State.</i> Rutgers (N. J.).....	E.	L.	H.		M.
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## THE BACHELOR'S DEGREE IN EDUCATION.

## INSTITUTIONS PRESCRIBING ONE SUBJECT.

1	<i>State.</i> Mississippi.....	E.				
1	<i>Endowed.</i> Chicago.....	E.				
2	Columbia.....	E.				

## INSTITUTIONS PRESCRIBING TWO SUBJECTS.

1	<i>State.</i> Nevada.....	E.				M.
2	South Dakota.....	E.				M.

TABLE 18.—*Distribution of prescribed entrance subjects—Continued.*

## THE BACHELOR'S DEGREE IN EDUCATION—continued.

## INSTITUTIONS PRESCRIBING THREE SUBJECTS.

		English.	Language.	History.	Science.	Mathematics.
	<i>State.</i>					
1	Alabama.....	E.	L.	.....	.....	M.
2	Minnesota.....	E.	L.	.....	.....	M.
3	Missouri.....	E.	L.	.....	.....	M.
4	Tennessee.....	E.	L.	.....	.....	M.
5	Utah.....	E.	.....	H.	.....	M.
6	Arkansas.....	E.	.....	H.	S.	.....
	<i>Endowed.</i>					
1	George Washington.....	E.	L.	.....	.....	M.
2	Pittsburgh.....	E.	.....	H.	.....	M.

## INSTITUTIONS PRESCRIBING FOUR SUBJECTS.

		English.	Language.	History.	Science.	Mathematics.
	<i>State.</i>					
1	Howard (D. C.).....	E.	L.	H.	.....	M.
2	Georgia.....	E.	L.	H.	.....	M.
3	Iowa.....	E.	L.	H.	.....	M.
4	Louisiana.....	E.	L.	H.	.....	M.
5	North Carolina.....	E.	L.	H.	.....	M.
6	Texas.....	E.	L.	H.	.....	M.
7	Vermont.....	E.	L.	H.	.....	M.
8	Michigan.....	E.	L.	.....	S.	M.
9	South Carolina.....	E.	.....	H.	S.	M.
	<i>Endowed.</i>					
1	Tulane.....	E.	L.	.....	S.	M.

## INSTITUTIONS PRESCRIBING FIVE SUBJECTS.

		English.	Language.	History.	Science.	Mathematics.
	<i>State.</i>					
1	Colorado.....	E.	L.	H.	S.	M.
2	Florida.....	E.	L.	H.	S.	M.
3	Idaho.....	E.	L.	H.	S.	M.
4	Kansas.....	E.	L.	H.	S.	M.
5	Nebraska.....	E.	L.	H.	S.	M.
6	New Mexico.....	E.	L.	H.	S.	M.
7	Ohio State University.....	E.	L.	H.	S.	M.
8	Miami (Ohio).....	E.	L.	H.	S.	M.
9	Oklahoma.....	E.	L.	H.	S.	M.
10	Oregon.....	E.	L.	H.	S.	M.
11	Washington.....	E.	L.	H.	S.	M.
12	Wyoming.....	E.	L.	H.	S.	M.
	<i>Endowed.</i>					
1	Johns Hopkins.....	E.	L.	H.	S.	M.

## DISTRIBUTION OF PRESCRIBED ENTRANCE SUBJECTS.

The selection of one or more of the following subjects—English, foreign language, history, science, and mathematics—as the prescribed entrance subjects is the first step in distribution. These subjects are also the basis of the articulation of entrance and graduation requirements.

According to Table 18, we find the following distribution of prescribed subjects:

*For the A. B. degree.*

STATE.	ENDOWED.
0 prescribes 1 subject.	2 prescribe 1 subject.
5 prescribe 2 subjects.	0 prescribes 2 subjects.
6 prescribe 3 subjects.	16 prescribe 3 subjects.
17 prescribe 4 subjects.	19 prescribe 4 subjects.
20 prescribe 5 subjects.	12 prescribe 5 subjects.
1 prescribes 6 subjects.	

*For the B. S. degree.*

STATE.	ENDOWED.
1 prescribes 1 subject.	1 prescribes 1 subject.
4 prescribe 2 subjects.	0 prescribes 2 subjects.
1 prescribes 3 subjects.	8 prescribe 3 subjects.
4 prescribe 4 subjects.	9 prescribe 4 subjects.
11 prescribe 5 subjects.	10 prescribe 5 subjects.
1 prescribes 6 subjects.	

*For the B. Ed. degree.*

STATE.	ENDOWED.
1 prescribes 1 subject.	2 prescribe 1 subject.
2 prescribe 2 subjects.	0 prescribes 2 subjects.
6 prescribe 3 subjects.	2 prescribe 3 subjects.
9 prescribe 4 subjects.	1 prescribes 4 subjects.
12 prescribe 5 subjects.	1 prescribes 5 subjects.

*For the Ph. B. degree.*

STATE.	ENDOWED.
1 prescribes 4 subjects.	1 prescribes 3 subjects.
	2 prescribe 4 subjects.
	2 prescribe 5 subjects.

*For the Litt. B. degree.*

STATE.	ENDOWED.
1 prescribes 4 subjects.	1 prescribes 3 subjects.

The average number of prescribed entrance subjects for the A. B. degree for all State universities is approximately 4.04; for the endowed schools, 3.70. This indicates that the State schools control distribution through the prescribed subjects to a greater extent than do the endowed schools.

The average number of prescribed entrance subjects for the B. S. degree for all State universities is approximately 4.04, and for the endowed schools, exactly 4. The tendency to a wider distribution is slightly greater in the State schools.



The average number of prescribed entrance subjects for the Ph. B. degree for the 5 endowed schools is 3.80, or less than the 4 prescribed subjects of the State school.

For the Litt. B. degree, the State schools prescribe four subjects; the endowed schools, 3.

The average number of prescribed subjects for the degree in education in State schools is 3.96 subjects, while in the endowed schools it is only 2.83 subjects.

#### DISTRIBUTION AS DETERMINED BY THE SEMIELECTIVE SUBJECTS.

Semielective subjects may count for distribution as well as for concentration.

*State schools.*—At Rutgers College, the permission to “substitute 1 unit of science for 1 of the 2 prescribed units of history,” increases the distribution of prescribed subjects from four to five subjects.

*Endowed schools.*—Brown University, which requires English, foreign language, history, and mathematics, increases the number of four distribution subjects to five if one of the scientific subjects is chosen by requiring the choice of 4 units, to be chosen from chemistry, physics; or language other than English.

Carleton College increases the distribution of the three entrance subjects, English, foreign languages, and mathematics, to either 4 or 5, because “two series of 2 units each to the extent of 4 units, must be added from the following group of subjects: Foreign language, history, and social sciences, natural sciences, and mathematics.”

Columbia University increases the distribution of the three entrance subjects, English, foreign language, and mathematics to either four or five subjects, by adding 2 units of intermediate or advanced subjects from group 1 of the elective subjects (seven subjects).

Leland Stanford increases the normal distribution of the one subject, English, to two or three subjects, if either mathematics or Latin are to be studied in college, in which case these subjects must be taken as preparatory work.

Tulane, which has 3 distribution subjects, English, foreign language, and mathematics, increases distribution to either four or five subjects in connection with the A. B. course. “Either Greek, history, or science to the extent of 2 units” must be added to the 3 prescribed units.

Vanderbilt adds an additional distribution entrance subject for the B. S. course, by requiring 2 units of either history or science. This makes a total of four subjects in either case.

Vassar increases the normal distribution of four entrance subjects to 5, by requiring “1 or 2 units selected from a third foreign language or a science or American history.” The distribution, however, is not increased, if the additional modern language is elected.

**DISTRIBUTION AS DETERMINED BY GROUP ELECTIVES.**

The group systems give opportunity for further distribution than is indicated by the prescribed entrance studies, the semielectives, or both. For instance, the prescribed entrance distribution group of Michigan may be increased, if the student elects a vocational subject from group 2. If he elects history from group 1, the distribution subjects will be increased to five.

The same method of adding distribution subjects for entrance holds equally true for Tufts, Mississippi, Columbia, Wellesley, Iowa, South Dakota, Chicago, Illinois, New Hampshire (B. S.), Beloit, Grinnell, and Hamilton.

**DISTRIBUTION AS DETERMINED BY FREE ELECTIVES ONLY.**

Inasmuch as only 23 out of the 101 institutions utilize the group system in any of its forms in determining the character of entrance subjects, it is evident that the remaining 78 institutions, most of which offer free electives in the entrance subjects, give some opportunity for further distribution than is indicated by the prescribed distribution subjects. However, the subjects elected may either increase distribution or may strengthen by further concentration one of the original prescribed subjects.

**DISTRIBUTION AS DETERMINED BY MORE THAN TWO AGENCIES.**

Few institutions utilize more than two agencies of distribution. A typical example is that of Teachers College, Columbia University, which increases the distribution made by the three prescribed subjects, by the addition of two semielectives and group electives.

**CONCENTRATION IN COLLEGE ENTRANCE SUBJECTS.**

The quantity of units required in any given subject may be prescribed by different methods. In schools where all subjects are prescribed and there are no electives, the concentration in any subject is fixed. The only examples of this type are Bryn Mawr College and the Catholic University, with respect to the A. B. course; and Rutgers College with respect to the B. S. course.

In colleges where electives are permitted, concentration may be obtained through the semielectives. In Baker University concentration in any of the five prescribed subjects may be increased from 1 to 3 units.

In Brown University additional concentration in English, foreign languages, or mathematics must be gained by means of 2 units of "intermediate or advanced subjects from group 1 of the elective subjects" (seven subjects).

In Haverford College with four prescribed subjects, further concentration from 1 to 2 units may be made in language or history. Fur-

ther concentration may also be obtained from the group subjects in Columbia University. In all other colleges, additional concentration in any entrance subject is made through the free electives.

*Amount and average of concentration in prescribed entrance requirements.*—The amount of concentration in each prescribed entrance subject is found in the minimum and maximum tables and the summaries of these tables in the previous section on "The prescribed entrance subjects."

SUMMARY OF CHARACTERISTICS OF COLLEGE ENTRANCE REQUIREMENTS FOR THE BACHELOR'S DEGREE.

1. *Minimum age limit.*—The minimum age limit for entrance to the colleges of liberal arts is as follows: In 1 State school and 1 endowed, 15 years; in 24 State schools and 6 endowed, 16 years; in 1 endowed school, 17 years.

One-half of the State schools publish a minimum age limit, while only one-seventh of the endowed schools mention it.

As far as published data show, 16 years is the more common minimum age limit for entrance to liberal arts colleges.

2. *Moral character.*—Twenty-three State and 29 endowed institutions require the presentation of a statement, or a certificate of approval regarding the entrant's moral character, or a certificate of honorable dismissal.

3. *Physical condition.*—Four State and six endowed schools make definite prescriptions respecting the physical fitness of the candidate for entrance. The endowed schools include four women's colleges—Goucher, Smith, Wells, and Wellesley.

4. *Method of entrance.*—Fifty out of the 51 State schools and 49 out of the endowed schools admit on examination at the college. Eleven out of the 51 State schools and 35 out of the 50 endowed schools announce the acceptance of the C. E. E. B. examinations. Five out of the 51 State schools and 16 out of the 50 endowed schools announce the acceptance of the New York State Board of Regent's examinations. Fifty-one out of the 51 State schools and 45 out of the 50 endowed schools accept certificates of accredited secondary schools. One State school and 2 endowed schools announce the plan of part certification and comprehensive examinations. Ten endowed schools have adopted the plan of certification and comprehensive examinations. Eight out of the 51 State schools accept the graduates of approved normal schools. At least 3 out of 51 State schools and 1 out of the 50 endowed schools accept appropriate State teachers' certificates.

5. *Definition and nomenclature of unit of credit.*—Only 5 of the 51 State and 22 of the 50 endowed colleges clearly define the word "unit."

6. *Entrance with conditions.*—Thirteen State and 26 endowed schools do not make any statement in regard to conditioned entrance.

Eight State and five endowed schools admit conditioned students without specifying the exact number of units which may be short in credit.

Seven State and nine endowed schools permit 1 unit of conditioned work.

Twenty-five State and five endowed schools permit entrance conditions to the extent of 2 units.

Two endowed schools permit entrance conditions to the extent of  $2\frac{1}{2}$  units.

One endowed school permits entrance conditions to the extent of 3 units.

One endowed school permits entrance conditions to the extent of 5 units (Bryn Mawr 20-5).

*The prescribed entrance subjects compared as to number of units.*—The subjects which are more uniform respecting the number of units required are English and mathematics. The tendency in mathematics is for 2 units in the State schools and  $2\frac{1}{2}$  units in the endowed. Science and history (social science) vary but little from 1 unit, although they are not required by more than one-half as many schools as is English. Foreign language varies the most as to the number of units required. Latin is prescribed for entrance by 8.17 per cent of the State schools and by 10 per cent of the endowed schools. Ancient language is prescribed singly and in combination with other languages for the A. B. degree by 33 per cent of the State schools and 56 per cent of the endowed.

#### AVERAGES.

The highest general average in any prescribed subject is in foreign language—3.73 units. The minimum average requirement is that of the B. S. degree (State)—2.41, and the maximum, not counting the 6 units of the Ph. B. (endowed), is 4.86 units A. B. degree (endowed).

The next in order is English—2.83 units. The minimum average requirement is that of the A. B. and B. S. degrees, 2.95 units; the maximum being 3 units—B. Ed. endowed schools.

Following English is mathematics—2.50 units. The minimum average requirement is 2.17 units, and the maximum, 2.66 units—Ph. B. endowed schools.

Social science is the next, with 1.20 units. The minimum being 1 unit—B. Ed. and Litt. B. endowed, the maximum is found in the B. S. (State schools)—1.37 units.

Science varies but little from social science, 1.19 units; the maximum is 1.12 units—A. B. (State), and the maximum for the B. S. (endowed) is 1.30 units. This does not include the average for the Ph. B. (endowed)— $1\frac{1}{2}$  units.

*The total prescribed entrance requirements.*—Considering the general averages of the different degrees, we find a reasonable degree of uniformity in the number of prescribed entrance units. There is a deviation from the general average of 9.95 units by the A. B. (State) to the extent of minus 0.93; for the A. B. (endowed), plus 0.82; for the B. S. (State), minus 2.12; for the B. S. (endowed), minus 0.51 for the B. Ed. (State), minus 1.05; for the B. Ed. (endowed), minus 3.70; for the Ph. B. (endowed), plus 1.96. The divergencies of importance are those of the B. Ed. endowed and Ph. B. endowed. The other instances are individual and are not brought into comparison.

*The total elective entrance requirements.*—The same tendencies to a reasonable uniformity are shown in the average total number of elective units.

*The use and characteristics of entrance electives.*—Three State and nine endowed institutions offer semielectives as a part of the entrance requirements. The functions of the semielectives in the aforementioned groups are for concentration only in the three State schools and three of the endowed, for either distribution or concentration in two endowed schools, and for distribution in one endowed school.

*The use and characteristics of group electives.*—Nine State and nine endowed take advantage of the group system to facilitate further distribution or concentration. Two institutions have 2 elective groups; 4 have 3 elective groups; 3 have 4 elective groups; 2 have 5 elective groups; and 1 has 1 elective group.

*The degree groups.*—Five State and 12 endowed schools have elective degree entrance groups for the A. B. and B. S. degrees.

Five endowed schools have similar groups for the A. B., B. S., and Ph. B. degrees.

One endowed school has groups for the A. B., Litt. B., and B. S. degrees.

One endowed school has groups for the A. B., B. S., Ph. B., and L. H. B.

Three State and one endowed list distinct entrance groups for the bachelor's degree in education.

Three State and two endowed institutions provide from two to three distinct entrance core groups which admit to the one degree—A. B.

*Vocational electives for entrance.*—One State school allows 2 vocational elective units; 6 allow 3; 11 allow 4; 2 endowed schools allow 4; and 1 State school allows 6.

*Total requirements.*—The principal deviations from the average total entrance requirements (14.86 units) are those of the Ph. B., endowed, which exceeds the average by 1.15 units, and the Litt. B.

endowed, which exceeds it by 1.64. The present tendency of total entrance requirements is toward 15 units.

There is a general tendency in entrance requirements to prescribe two-thirds of the work and permit the election of one-third.

The following is a summary of tendencies in distribution of prescribed subjects for entrance: Thirty-eight out of 48 State schools require from 4 to 6 entrance subjects for the A. B. degree. Thirty-one out of 49 endowed schools require from 4 to 5 entrance subjects for the A. B. degree. Sixteen out of 22 State schools require from 4 to 6 entrance subjects for the B. S. degree. Nineteen out of 27 endowed schools require from 4 to 5 entrance subjects for the B. S. degree. One State school requires 4 subjects for entrance to the Ph. B. course. Four out of 5 endowed schools require from 4 to 5 subjects for entrance to the Ph. B. course. One State school requires 4 subjects for entrance to the Litt. B. course. One endowed school requires 3 subjects for entrance to the Litt. B. course. Twenty-one out of 30 State schools prescribe from 4 to 5 subjects for entrance to bachelor's courses in education. Two out of 6 endowed schools prescribe from 4 to 5 subjects for entrance to bachelor's courses in education.

Summing up the cases for all degrees we have: Seventy-seven out of 102, or about 75 per cent, of State-school degree courses require for entrance from 4 to 6 prescribed subjects. Fifty-seven out of 88, or about 64 per cent, of endowed-school degree courses require for entrance from 4 to 5 prescribed subjects. One hundred and thirty-four out of 190, or about 70 per cent, of degree courses require for entrance from 4 to 5 prescribed subjects.

This shows that a large majority of all the schools (70 per cent) require from 4 to 5 (or 6)<sup>1</sup> subjects for the prescribed entrance requirements, and that the State schools exceed the endowed schools by 11 per cent in maintaining these numbers of distribution subjects.

The average number of subjects required for entrance varies as follows:

TABLE 19.—*Average number of subjects required for entrance.*

	A. B.	B. S.	Ph. B.	Litt. B.	B. Ed.
State.....	4.04	4.04	4.00	4	3.96
Endowed.....	3.70	4.00	3.80	3	2.83

<sup>f</sup> The State schools show for all degrees a greater average number of prescribed distribution subjects than the endowed schools.

<sup>1</sup> Porto Rico.

## LACK OF UNIFORMITY IN THE COMBINATION OF PRESCRIBED ENTRANCE SUBJECTS.

*A. B. degree.*—Two out of 6 State schools and 2 out of 16 endowed institutions substitute history for language where the others prescribe English, foreign language, and mathematics.

Three out of 17 State schools differ in regard to the regular group of four subjects—English, foreign language, history, and mathematics. Two institutions—Illinois and Michigan—substitute science for history, while South Carolina drops language for science.

*B. S. degree.*—Two out of seven endowed schools vary from the regular combination of three subjects—English, foreign language, and mathematics. Pittsburgh substitutes history for language, while Columbia requires in place of the latter subject, science.

The combination, English, history, science, and mathematics is found in three institutions. At the University of Virginia this is changed to English, foreign language, science, and mathematics.

Of the nine endowed schools prescribing four subjects, Muhlenburg and New York favor science rather than language.

*The bachelor's degree in education.*—Two of the six State schools prescribing three subjects vary from the others as follows: Utah substitutes history for language, and Arkansas substitutes science for mathematics. The latter instance is the only example of mathematics being excluded from the prescribed subjects for entrance to any degree course with the exception of the following schools, Hawaii, Mississippi, Chicago, and Columbia, which prescribe one subject only.

Of the endowed schools prescribing three subjects, Pittsburgh differs from George Washington by substituting history for language.

Two of the nine State schools prescribing four subjects do not follow the regular order. Michigan requires science instead of history; South Carolina prescribes science instead of language.

The following is a summary of substitutions from the regular order<sup>1</sup> of subjects:

1. *State schools.*—Language is displaced by history in 3 instances, A. B. degree; and by history 2 instances, B. Ed. degree; total, 5 instances.

Science displaces history in 2 instances, A. B. degree; language, 1 instance, A. B. degree; 4 instances, B. S. degree; mathematics, 1 instance, B. S. degree; history, 1 instance, B. Ed. degree; language, 1 instance, B. Ed. degree. Total: Science displaces the aforementioned subjects 10 times.

2. *Endowed schools.*—History displaces foreign language in 2 instances, A. B. degree; 1 instance, B. S. degree; 1 instance, B. Ed.

<sup>1</sup> By regular order we mean English, language, history, science, mathematics, or as given in Table 18.

degree. Science displaces foreign language 1 instance, B. S. degree. Total: Language is displaced by history and science 5 times.

The preceding summary shows that the type of degree has relatively little influence on the distribution of the entrance subjects. The most noticeable and natural difference is found in the B. S. entrance requirements of State schools where science displaces foreign language in four instances.

The State institutions are inclined to offer a greater distribution of prescribed subjects than the endowed institutions, but the endowed schools demand greater concentration, especially in foreign language and mathematics.

On the whole, the standards for the Ph. B. and Litt. B. degrees are higher than for the average A. B. degree, but it is also true in the few schools granting these degrees, that their requirements for the A. B. and B. S. are equally high.

#### SUGGESTIONS.

The following suggestions may be derived from this chapter:

1. The publication of the minimum age limit should be omitted from the entrance requirements inasmuch as the principal reason for it no longer exists.

2. The physical fitness of the student should be considered in the prescribed entrance requirements. Secondary schools should insure as far as possible the physical as well as the mental fitness of all their students, and especially those who are preparing for college.

3. As the large majority of colleges and universities now use the term "unit" as the basic term for measuring entrance credits, it seems desirable that all other institutions should fall in line and use the same term.

4. A definite statement respecting the rules of the college governing conditions and their absolution should be published.



## Chapter III.

### COLLEGE REQUIREMENTS FOR THE CULTURAL DEGREES IN COLLEGES OF LIBERAL ARTS.

The following first degrees are granted by the institutions included in this discussion: Bachelor of arts, bachelor of science, bachelor of philosophy, and bachelor of literature, or of humane letters. Bachelor's degrees in education are also included, but other technical or vocational first degrees are omitted in this study.

The following tables show the distribution of these degrees in both State and endowed colleges of our list:

*Institutions limiting the cultural degree to the A. B. only.*

STATE.	STATE—continued.	ENDOWED—continued.
1. California.	18. Oklahoma.	6. George Washington.
2. Colorado.	19. Oregon.	7. Goucher.
3. Georgia.	20. Pennsylvania State Col- lege.	8. Johns Hopkins.
4. Indiana.	21. South Dakota.	9. Leland Stanford.
5. Iowa.	22. Tennessee.	10. Oberlin.
6. Louisiana.	23. Texas.	11. Pennsylvania.
7. Maine.	24. Utah.	12. Smith.
8. Michigan.	25. Washington.	13. Swarthmore.
9. Minnesota.	26. Wyoming.	14. Trinity.
10. Missouri.		15. Vassar.
11. Montana.	ENDOWED.	16. Washington (St. Louis).
12. New Mexico.	1. Amherst.	17. Washington and Lee.
13. Cornell (N. Y.)	2. Baker.	18. Wellesley.
14. North Carolina.	3. Bryn Mawr.	19. Wells.
15. Ohio State.	4. Colorado.	20. Western Reserve.
16. Ohio.	5. De Pauw.	21. Williams.
17. Miami.		22. Yale.

*State institutions of our list limiting the cultural degree to the B. S. only.*

#### STATE.

1. Hawaii.

| 2. New Hampshire.

*Institutions limiting the cultural degrees to the A. B. and B. S. only.*

STATE.	STATE—continued.	ENDOWED—continued.
1. Alabama.	15. South Carolina.	8. Grinnell.
2. Arizona.	16. Virginia.	9. Harvard.
3. Delaware.	17. William and Mary.	10. Haverford.
4. Howard.	18. State College of Wash- ington.	11. New York.
5. Florida.		12. North Western.
6. Idaho.		13. Pittsburgh.
7. Illinois. <sup>1</sup>	ENDOWED.	14. Randolph-Macon.
8. Kansas.	1. Beloit.	15. University of the South.
9. Kentucky.	2. Bowdoin.	16. Syracuse.
10. Mississippi.	3. Carleton.	17. Tufts.
11. Nebraska.	4. Colgate.	18. Tulane.
12. Nevada.	5. Columbia.	19. Vanderbilt.
13. North Dakota.	6. Dartmouth.	20. Wesleyan.
14. Porto Rico.	7. Earlham.	

*Institutions limiting the cultural degrees to the A. B. and Ph. B.*

STATE.	ENDOWED.
1. Wisconsin.	2. Brown.

*Institutions limiting the cultural degrees to the A. B., B. S., and Ph. B.*

STATE.	ENDOWED—continued.
1. Vermont.	2. Hamilton.
	3. Lafayette.
ENDOWED.	4. Muhlenberg.
1. Chicago.	5. Union.

*Institutions limiting the cultural degrees to the A. B., B. S., and Litt. B.*

STATE.	ENDOWED.
1. Rutgers (N. J.).	1. Princeton.

*Institutions granting four cultural degrees, A. B., B. S., Ph. B., and L. H. B.*

1. Catholic University.

*List of schools of education, etc., granting the bachelor's degree (A. B. or B. S. in Ed. and B. of Ped.) without professional diplomas, etc.*

STATE.		
1. Alabama.	8. Maine.	17. Washington.
2. Arkansas.	9. Minnesota.	18. Wyoming.
3. Florida.	10. Mississippi.	
4. Georgia.	11. Missouri.	ENDOWED.
5. Idaho.	12. North Carolina.	1. Chicago.
6. Kansas.	13. Ohio State University.	2. Johns Hopkins.
7. Louisiana.	14. South Carolina.	3. Tulane.
	15. Tennessee.	
	16. Vermont.	

<sup>1</sup> The B. S. course has been dropped.

The institutions listed below allow advanced standing to graduates of recognized State normal colleges who have fully satisfied the

college entrance requirements. The tendency is not to specify the exact amount of credit which may be accepted toward the college degree, but rather to treat normal-school credits on their merits.

It may be said in general of State-supported institutions that normal-school credits of collegiate character from State normal schools may be applied toward any collegiate degree for which such credits are usually counted in liberal arts colleges.

There is a tendency, however, to limit the amount of normal school credit to be applied on the college bachelor's curriculum in education to about two years—from 48 to 60 semester hours.

The University of Missouri, however, admits to its graduate schools the graduates of the four-year collegiate curricula of the State teachers' colleges of that State.

The following is a partial list of institutions granting advanced standing to normal-school students: University of Alabama, University of Arizona, University of California, University of Colorado, University of Idaho, University of Kansas, State University of Louisiana, University of Michigan, University of Minnesota, University of Missouri, University of North Dakota, Ohio State University, University of Oklahoma, University of Texas, University of Wisconsin, Leland Stanford, Jr., University, Teachers' College, George Washington University, Teachers' College, Columbia University, and New York University School of Pedagogy.

*List of schools of education, etc., granting the bachelor's degree (either A. B. or B. S. or both) with professional diplomas or with certification of the State.*

STATE.		ENDOWED.
	6. New Mexico.	
	7. Nevada.	
1. Colorado.	8. North Dakota.	1. Columbia.
2. Howard (D. C.)	9. Miami (Ohio).	2. George Washington.
3. Iowa.	10. Oklahoma.	3. Pittsburg.
4. Michigan.	11. Texas.	
5. Nebraska.	12. Utah.	

The following summary shows the number of institutions of our list, both State and endowed, which limit the cultural first degrees to the following types:

*General summary.*

	State.	Endowed.
A. B. only.....	26	22
B. S. only.....	2	0
A. B. and B. S. only.....	18	20
A. B. and Ph. B. only.....	2	0
A. B., B. S., and Ph. B. only.....	1	5
A. B., B. S., and Litt. B. only.....	1	1
A. B., B. S., Ph. B., and L. H. B.....	0	1

From the foregoing tables it is apparent that over one-half of the State schools and nearly the same proportion of endowed schools

grant only one cultural degree. The number of the schools granting the A. B. and B. S. degrees is not quite so large as that of the preceding group. Relatively few institutions grant more than two cultural degrees.

An examination of the catalogues from the years 1885 to 1890 of the schools granting the A. B. only shows that many of these granted from two to four cultural degrees. A partial list is here given:

*Two degrees.*—State institutions: 1. Illinois, A. B. and B. L. Endowed institutions: 1. Colorado, A. B. and Ph. B.; 2. Oberlin, A. B. and Ph. B.; 3. Wellesley, A. B. and B. S.

*Three degrees.*—State institutions: 1. California, A. B., B. L., Ph. B.; 2. Georgia, A. B., B. S., Ph. B.; 3. Ohio, A. B., B. S., Ph. B.; 4. Idaho, A. B., B. S., Ph. B. 5. Wisconsin, A. B., B. S., B. L. Endowed institutions: 1. Western Reserve, A. B., B. L., Ph. B.; 2. Trinity, A. B., B. S., Ph. B.

*Four degrees.*—State institutions: 1. Cornell, A. B., B. S., Ph. B., B. L.; 2. Delaware, A. B., B. S., Ph. B., B. L.; 3. Iowa, A. B., B. S., Ph. B., B. L.; 4. Missouri, A. B., B. S., Lit. B., A. D. B.; 5. Colorado, A. B., B. S., Ph. B., B. L.; 6. Michigan, A. B., B. S., Ph. B., B. L. Endowed institutions: Northwestern, A. B., B. S., Ph. B., B. L.

Among the institutions offering but two cultural degrees to-day there are also found those which offered more than two cultural degrees 20 or 30 years ago.

TABLE 20.—*Nomenclature of college unit.*

Name.	Semester hour value.	Year hour value.	Name.	Semester hour value.	Year hour value.
STATE SCHOOLS.			STATE SCHOOLS—CON.		
Alabama.....		Year hour.	Ohio University.....	Sem. hour...	
Arizona.....	Unit.....		Miami.....	do.....	
Arkansas.....	Sem. hour...		Oklahoma.....	do.....	
California.....	Unit.....		Oregon.....	do.....	
Colorado.....	Sem. hour...		Pennsylvania State College.....	do.....	
Delaware.....	Term hour...		Porto Rico.....	do.....	
Florida.....		Do.	South Carolina.....	do.....	
Georgia.....		Do.	South Dakota.....	do.....	
Hawaii.....	Credit.....		Tennessee.....		Year hour.
Howard (D. C.).....	Hour unit...		Texas.....	Sem. hour...	
Idaho.....	Credit.....		Utah.....	Credit hour...	
Illinois.....	Sem. hour...		Vermont.....		
Indiana.....	do.....		Virginia.....	Session hour.	Do.
Iowa.....	do.....		Washington.....	Credit.....	
Kansas.....	do.....		State College of Wash- ington.....	Sem. hour...	
Kentucky.....	Credit.....		West Virginia.....	do.....	
Louisiana.....		Do.	Wisconsin.....	Credit.....	
Maine.....	Sem. hour...		Wyoming.....	Sem. hour...	
Michigan.....	do.....			William and Mary.....	Credit.....
Minnesota.....	do.....			ENDOWED SCHOOLS.	
Mississippi.....				Baker.....	Sem. hour...
Missouri.....	Sem. hour...	Beloit.....		do.....	
Montana.....	Credit hour...		Brown.....	do.....	
Nebraska.....	Sem. hour...		Bryn Mawr.....	do.....	
New Hampshire.....	do.....		Carleton.....	do.....	
Rutgers (N. J.).....	do.....		Catholic.....	Half credit.	
New Mexico.....	Credit hour...		Colgate.....	Sem. hour...	
Cornell (N. Y.).....	Sem. hour...		Colorado.....	do.....	
Nevada.....	Unit.....				
North Carolina.....					
North Dakota.....	Sem. hour...	Do.			
Ohio State University.	do.....				

TABLE 20.—*Nomenclature of college unit*—Continued.

Name.	Semester hour value.	Year hour value.	Name.	Semester hour value.	Year hour value.
ENDOWED SCHOOLS—continued.			ENDOWED SCHOOLS—continued.		
Columbia.....	Point.....		Tulane.....		Year hour.
Dartmouth.....	Sem. hour.....		Union.....	Sem. hour.....	
De Pauw.....	do.....		Yanderbilt.....		Do.
Earlham.....	Credit hour.....		Vassar.....		Do.
George Washington.....	Sem. hour.....		Washington (St. Louis).....	Unit.....	
Goucher.....	do.....		Washington and Lee.....	Point.....	
Grinnell.....	do.....		Wellesley.....		Do.
Hamilton.....			Wells.....	Sem. hour.....	
Haverford.....		Year hour.	Wesleyan.....		Do.
Johns Hopkins.....		Do.	Western Reserve.....	Sem. hour.....	
Lafayette.....	Sem. hour.....	Do.	Williams.....		Do.
Leland Stanford.....	Unit.....		Yale.....		Do.
Muhlenberg.....	Credit.....		OTHER NOMENCLATURE.		
New York.....	Sem. hour.....	Unit.	Amherst.....	Course=3 Sem. hours.	
Northwestern.....	Credit hour.....		Bowdoin.....		Course = 1 year.
Oberlin.....		Unit.	Harvard.....		Do.
Pennsylvania.....	Credit.....		Chicago.....	Major=12 weeks, 4 or 5 recitations per week. Minor=6 weeks, etc.	
Pittsburgh.....		Year hour.			
Princeton.....		Do.			
Randolph-Macon.....		Do.			
Smith.....		Do.			
University of the South.....	Sem. hour.....	Do.			
Swarthmore.....	do.....				
Syracuse.....	do.....				
Trinity (N. C.).....	do.....				
Tufts.....	do.....				

### VALUE AND NOMENCLATURE OF UNIT OF MEASUREMENT OF COLLEGE REQUIREMENTS.

According to Table 20, there is a lack of uniformity in the length of the college unit of measuring credit. There is also considerable difference in the nomenclature of these units. The unit most frequently employed is the semester hour which is used by 43 of the State schools and 28 of the endowed, although only 28 of the State schools and 20 of the endowed schools call it "semester hour." The other terms used by the State institutions are "unit," "term hour," "credit," "credit hour," and "session hour." Among the endowed institutions are found the following terms: "Half credit," "point," "credit hour," "unit," "credit," and "course."

The remaining 8 of the State schools and 17 of the 21 remaining endowed schools use the "year hour" and all but two of them call it by this name. The two exceptions use the term "unit."

Two other endowed schools reckon the college year by use of the term "course." Another institution uses the terms "major" and "minor." The "major" is a unit 12 weeks long with 4 or 5 recitations weekly. The "minor" is only 6 weeks in length.

*Length of courses for the bachelor's degree.*—The college courses leading to the different bachelor's degrees are four years in length, although many institutions permit students of ability to reduce this period to

three and one-half or even three years. The reduction in time is usually allowed for by giving credit for a surplus of secondary school work of the requisite grade, by the acceptance of credits gained in summer schools, or by increasing the weekly and annual quota of required hours.

The length of the school year varies from eight to nine months, although there is considerable difference in the amount of time granted for vacations, mid-year, and final examinations as well as for commencement. A further study of this question would doubtless show that the actual number of teaching days for the bachelor's degree varies considerably in the different universities and colleges in this country.

*Minimum residence.*—Twenty-four State and 26 endowed institutions of our list announce a minimum period of residence for obtaining the bachelor's degree.

Nine State and eight endowed institutions require a minimum residence of one year, no other restrictions being stated. The institutions are: Alabama, Illinois, Iowa, Nevada, North Dakota, Miami, Oregon, Texas, Virginia, Brown, Colorado College, George Washington, Grinnell, Leland Stanford, Muhlenburg, University of the South, Swarthmore, and Vassar.

Carleton requires one year's residence, which must include the last semester. Ohio and Wyoming require two semesters; De Pauw requires one year, subject to vote. The senior year is required by five State and six endowed schools (Arkansas, Missouri, New Mexico, Cornell (N. Y.), Ohio State, and Colgate, Goucher, Johns Hopkins, Smith, Washington (St. Louis), and Wells) but the number of hours are not specified. Two State and two endowed schools prescribe the number of hours of senior residence: Iowa, Kansas, and Oberlin, 30 semester hours; Pennsylvania, 24 semester hours.

Ten State and four endowed institutions require a definite number of hours of residence without stating the year; they are as follows: Arizona, 20 semester hours; California, South Dakota, and Columbia, 24 semester hours; Utah, 25 semester hours; Vanderbilt, 28 semester hours; Colorado, Michigan, Nebraska, West Virginia, Bowdoin, and Western Reserve, 30 semester hours; Mississippi, 32 semester hours; Washington State College, 36 semester hours.

*Maximum residence for the bachelor's degree.*—Only one institution, Columbia University, limits the time beyond which the bachelor's degree may not be granted, the limit being six years.

*Credit for quality.*—Eleven institutions of our list grant credit for quality of scholarship by increasing or decreasing the number of hours required for graduation according to the number of scholarship points obtained. These institutions are Michigan, Missouri,

New Mexico, Oklahoma, Beloit, Columbia, Dartmouth, Johns Hopkins, Swarthmore, Vanderbilt, and Williams.

*Schemes for giving credit for quality.*—The University of Missouri announces the following:

"Students making a grade of 'E' will be allowed 30 per cent additional credit; those making a grade of 'S' will be allowed 15 per cent additional credit; those making a grade of 'I' will have 15 per cent deducted from their credit."

At the University of New Mexico the number of credit hours required for all diplomas and degrees conferred by the university is based upon average work which is designated M. For every 15 credit hours of S (superior) work the amount required for graduation is diminished by two credit hours; for every 15 credit hours of G (good) work the amount required for graduation is diminished by one credit hour; for every 15 credit hours of W (weak) work the amount required for graduation is increased by one credit hour.

Beloit College uses the following plan:

AA, work of extraordinary quality, one credit for each hour completed; A, excellent work, eight-tenths of a credit for each hour; B, good work, five-tenths of a credit for each hour; C, fair work, two-tenths of a credit for each hour; F, failure, with privilege of reexamination; FF, failure, without privilege of reexamination. A plus or a minus accompanying a grade adds or subtracts one-tenth of a credit for each hour.

Sixteen hours and four and one-half credits for the freshman and sophomore years.

Fifteen hours and five credits for the junior and senior years.

Johns Hopkins University states:

A student may offer 119 "points" for graduation instead of 125; in case a student has an average of not less than 9 for the work of his third year, and has not received a mark as low as 7 for any of his courses since admission to the university, he need offer only 119 points for graduation.

Other schemes designed to encourage a high quality of work are the following:<sup>1</sup>

*Kentucky*—120 hours and 120 points.—A equals 3 points, B equals 2 points, C equals 1 point, D equals 0 point, E equals failure.

*Michigan*—120 hours and 120 points.—A equals 3 points, B equals 2 points, C equals 1 point, D equals 0 point, E equals 0 hours and 0 points.

*Oklahoma*—124 hours and not less than 174 points.—A or A minus equals 3 points, B or B minus equals 2 points, C equals 1 point, D equals 1 hour and 0 point.

*Minnesota*—120 hours and 120 honor points.—A equals 3 points, B equals 2 points, C equals 1 point.

*Swarthmore*—124 hours and 124 points.—A equals 3 points, B equals 2 points, C equals 1 point, D equals 0 point but is a pass.

*Vanderbilt*—64 quantity hours and 60 quality hours.—A equals 3 points, B equals 2 points, C equals 1 point, D equals 0 point.

*Dartmouth* (1918)—122 semester hours and 220 points.—A equals 4 points, B equals 3 points, C equals 2 points, D equals 1 point.

<sup>1</sup> Each hour of credit is valued in points.

### **TYPES OF PRESCRIBED SUBJECTS—COLLEGE GRADUATION REQUIREMENTS.**

The types of prescribed subjects for college graduation requirements may be classified under the same heads as those of the prescribed entrance units as follows: (a) Specific subject; (b) subject (course unspecified); (c) core group, degree group.

The specific subject type comprehends any single prescribed subject, as freshman rhetoric, college algebra, or plane trigonometry, subjects for which no substitution may be made in any definite degree course.

The subject type with course unspecified comprehends foreign language, science, or social science, the group subject standing out more prominently than any single subject of its group.

In the degree group the prescribed subjects definitely characterize a specific degree as shown in the degree groups of the Universities of Alabama, Arizona, Illinois, Bowdoin, Lafayette, and the Catholic University, and others.

The core group is the same as the degree group but the prescribed subjects which characterize the group lead to the same degree. For example, at the University of North Carolina group 1 includes the following prescribed subjects: English, mathematics, Greek and Latin, and French or German; group 3 includes English, mathematics, French and German, science and history. But both groups lead to one degree—the bachelor of arts.

Other examples may be found in the curricula of the following schools: George Washington, Johns Hopkins, Trinity, and Tulane of Louisiana.

### **NUMBER AND NAMES OF SUBJECTS PRESCRIBED FOR THE BACHELOR'S DEGREE.**

In the chapter on entrance requirements it was found that a total of 5 subjects is prescribed for entrance to college by the institutions under discussion (not including Porto Rico), though not all these subjects are necessarily prescribed by any one institution.

In the colleges we find that not only English, foreign language, mathematics, science, and social science are required, but also philosophy and psychology, Bible, education, hygiene, public speaking, art, drafting, drawing, mechanics, matriculation or freshmen lectures, bibliography, and library methods, making a total of 12 subjects. Physical training and military science are excluded in this discussion.



TABLE 21.—*Distribution of prescribed subjects according to the different degrees.*

Degree.	English.	Foreign language.	Social science.	Science.	Mathematics.	Philosophy and psychology.	Bible.	Education.	Hygiene.	Public speaking.	Art.	Marriage and literature.	Bibliography.	Drafting.	Drawing.	Mechanics.	Library methods.	No. of instances.
A. B. (State).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	13
A. B. (endowed).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	12
B. S. (State).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	8
B. S. (endowed).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	12
B. Ed. (State).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	10
B. Ed. (endowed).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	10
Ph. B. (State).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	4
Ph. B. (endowed).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	9
Litt. B. (State).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	6
Litt. B. (endowed).....	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	×	5

NOTE.—The subjects to the left of the double line are both entrance and graduation subjects; those to the right are graduation subjects only.

Table 21 shows the general relation of the subjects which are prescribed both for entrance and for college to those which are strictly college subjects. The question of distribution of prescribed college subjects is taken up in a following section:

TABLE 22.—*College requirements in English for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in English.	Per cent required in English.
1	Cornell University (N. Y.).....	120	0	0
2	University of Illinois.....	123	4	3.25
3	University of Nebraska.....	121	4	3.30
4	Indiana University.....	120	4	3.33
5	Ohio State University.....	120	4	3.33
6	University of Kansas.....	120	5	4.16
7	University of South Dakota.....	128	6	4.68
8	University of Arkansas.....	126	6	4.76
9	University of Wyoming.....	123	6	4.87
10	University of Missouri.....	122	6	4.91
11	University of Colorado.....	120	6	5
12	Howard University (D. C.).....	120	6	5
13	University of Florida.....	120	6	5
14	University of Michigan.....	120	6	5
15	University of Minnesota.....	120	6	5
16	University of Montana.....	120	6	5
17	University of Nevada.....	120	6	5
18	Ohio University.....	120	6	5
19	Miami University (Ohio).....	120	6	5
20	University of Oregon.....	120	6	5
21	University of Porto Rico.....	120	6	5
22	University of Utah.....	120	6	5
23	University of Washington.....	120	6	5
24	University of Wisconsin.....	120	6	5
25	University of California.....	117	6	5.12
26	Rutgers College (N. J.).....	132	8	6.06
27	University of Oklahoma.....	122	8	6.55
28	University of Maine.....	107	8	7.48
29	University of Vermont.....	126	10	7.93
30	West Virginia University.....	124	10	8.06
31	University of North Dakota.....	122	10	8.19
32	State University of Iowa.....	120	10	8.33
33	University of South Carolina.....	138	12	8.69
34	Louisiana State University.....	136	12	8.82
35	University of Georgia.....	130	12	9.23
36	University of Mississippi.....	130	12	9.23

TABLE 22.—*College requirements in English for the bachelor's degree—Continued.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Hours required in English.	Per cent required in English.
37	University of Kentucky.....	128	12	9.37
38	University of Alabama.....	120	12	10
39	University of Idaho.....	120	12	10
40	University of New Mexico.....	120	12	10
41	University of Tennessee.....	120	12	10
42	University of Texas.....	120	12	10
43	University of North Carolina.....	120	14	11.66
44	Pennsylvania State College.....	132	15	11.35
45	College of William and Mary.....	120	15	12.50
46	Delaware College.....	128	16	12.50
47	University of Arizona.....	120	16	13.33
48	University of Vermont.....	120	18	15
49	State College of Washington.....	150	20	13.33

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Leland Stanford University.....	120	0	0
2	Harvard University.....	120	0	0
3	Yale University.....	120	0	0
4	Princeton University.....	126	4	3.17
5	Williams College.....	124	4	3.22
6	Beloit College.....	120	4	3.33
7	Earlham College.....	120	4	3.33
8	Oberlin College.....	118	4	3.38
9	Colgate University.....	136	5	3.67
10	Catholic University of America (medical group).....	152	6	3.48
11	Lafayette College.....	130	6	4.61
12	University of Pittsburgh.....	128	6	4.68
13	Vanderbilt University.....	128	6	4.68
14	Washington and Lee University.....	126	6	4.76
15	Amherst College.....	122	6	4.91
16	Western Reserve University.....	122	6	4.91
17	Carleton College.....	120	6	5
18	Dartmouth College.....	120	6	5
19	George Washington University.....	120	6	5
20	Grinnell College.....	120	6	5
21	New York University.....	120	6	5
22	Smith College.....	120	6	5
23	Syracuse University.....	120	6	5
24	Tufts College.....	120	6	5
25	Wesleyan University.....	120	6	5
26	Wellesley College.....	118	6	5.08
27	Vassar College.....	111	6	5.45
28	University of Chicago.....	120	63	5.48
29	Bowdoin College.....	120	8	5.88
30	Haverford College.....	128	8	6.25
31	Swarthmore College.....	124	10	8.06
32	Columbia University.....	120	10	8.33
33	Goucher College.....	120	10	8.33
34	Northwestern University.....	120	10	8.33
35	Wells College.....	115	10	8.69
36	Catholic University of America (school of sciences).....	168	12	7.14
37	Catholic University of America (economics group).....	162	12	7.32
38	Catholic University of America (school of philosophy, classical group).....	152	12	7.87
39	Catholic University of America (Latin-historical group).....	152	12	7.89
40	University of the South.....	136	12	8.82
41	Trinity College (N. C.).....	128	12	9.37
42	Tulane University.....	128	12	9.37
43	Johns Hopkins University.....	125	12	9.60
44	Baker University.....	120	12	10
45	Brown University.....	120	12	10
46	Colorado College.....	120	12	10
47	George Washington University.....	120	12	10
48	University of Pennsylvania.....	120	12	10
49	Washington College (St. Louis).....	120	12	10
50	Union University.....	138	17	12.31
51	Catholic University of America (modern language group).....	152	18	11.84
52	Randolph-Macon College.....	128	18	14.05
53	Muhlenburg College.....	140	20	14.28
54	Bryn Mawr College.....	120	20	16.66
55	De Pauw University.....	120	22	18.33
56	Hamilton College.....	124	24	19.34

TABLE 22.—*College requirements in English for the bachelor's degree*—Continued.

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in English.	Per cent required in English.
1	University of Illinois.....	123	3	2.43
2	University of Nebraska.....	121	4	3.33
3	New Hampshire College.....	132	6	4.54
4	University of Kentucky.....	128	6	4.68
5	University of Arkansas.....	128	6	4.68
6	Howard University (D. C.).....	120	6	5
7	University of Florida.....	120	6	5
8	University of Nevada.....	120	6	5
9	University of Porto Rico.....	120	6	5
10	Rutgers College (N. J.).....	135	8	6
11	College of William and Mary.....	120	9	7.50
12	University of Vermont.....	132	10	7.57
13	University of North Dakota.....	122	10	8.19
14	University of Arizona.....	120	10	8.33
15	University of South Carolina.....	138	12	8.69
16	University of Mississippi.....	120	12	9.23
17	College of Hawaii.....	128	12	9.37
18	University of Alabama.....	120	12	10
19	University of Idaho.....	120	12	10
20	University of Virginia.....	120	12	10
21	Delaware College.....	128	16	12.50
22	University of Virginia.....	120	18	15
23	State College of Washington.....	150	20	13.33

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.<sup>1</sup>

1	Harvard University.....	120	0	0
2	Princeton University.....	126	4	3.17
3	Earlham College.....	120	4	3.33
4	Beloit College.....	120	4	3.33
5	Colgate University.....	136	5	3.67
6	Lafayette College.....	134	6	4.47
7	University of Pittsburgh.....	128	6	4.68
8	Vanderbilt University.....	128	6	4.68
9	Carleton College.....	120	6	5
10	Dartmouth College.....	120	6	5
11	Grinnell College.....	120	6	5
12	New York University.....	120	6	5
13	Syracuse University.....	120	6	5
14	Tufts College.....	120	6	5
15	Wesleyan College.....	120	6	5
16	University of Chicago.....	120	6½	5.48
17	Bowdoin College.....	120	8	5.88
18	Haverford College.....	128	8	6.25
19	Columbia University.....	120	10	8.33
20	Northwestern University.....	120	10	8.33
21	Catholic University of America.....	173	12	6.92
22	Tulane University.....	142	12	8.45
23	Muhlenberg College.....	140	12	8.57
24	University of the South.....	136	12	8.82
25	Union University.....	138	18	13.04
26	Randolph-Macon College.....	128	18	14.05
27	Hamilton College.....	124	24	19.34

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Oregon.....	120	3	2.50
2	University of Nebraska.....	121	4	3.30
3	University of Kansas.....	132	5	3.79
4	University of Arkansas.....	125	6	4.76
5	University of Washington.....	124	6	4.83
6	University of Wyoming.....	123	6	4.87
7	University of Colorado.....	120	6	5
8	University of Florida.....	120	6	5
9	University of Michigan.....	120	6	5
10	University of Minnesota.....	120	6	5

<sup>1</sup> Harvard College requires 6 semester hours college English unless student passes the entrance requirement in English.

TABLE 22.—*College requirements in English for the bachelor's degree*—Continued.

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Hours required in English.	Per cent required in English.
11	University of Missouri.....	120	6	5
12	University of Nevada.....	120	6	5
13	University of Utah.....	120	6	5
14	University of Oklahoma.....	128	8	6.24
15	University of Idaho.....	120	8	6.66
16	University of Vermont.....	126	10	7.93
17	University of North Dakota.....	122	10	8.19
18	State University of Iowa.....	120	10	8.33
19	Ohio State University.....	120	10	8.33
20	University of South Carolina.....	136	12	8.69
21	Louisiana State University.....	138	12	8.82
22	University of Georgia.....	132	12	9.08
23	University of Mississippi.....	130	12	9.23
24	University of New Mexico.....	128	12	9.38
25	Howard University (D. C.).....	126	12	9.52
26	University of Texas.....	126	12	9.52
27	University of North Carolina.....	120	12	10
28	University of Tennessee.....	120	12	10
29	Miami University (Ohio).....	120	32	26.26

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	128	6	4.68
2	George Washington University.....	124	6	4.83
3	University of Chicago.....	120	6	5.50
4	Johns Hopkins University and Goucher College.....	120	8	6.66
5	Tulane University.....	132	12	9.08
6	Columbia University.....	120	12	10

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	126	10	7.93
1	Rutgers College (N. J.) (for Litt. B.).....	132	8	6.06

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Lafayette College (for Ph. B.).....	130	6	4.61
2	University of Chicago (for Ph. B.).....	120	6½	5.48
3	Catholic University of America (for Ph. B.).....	152	12	7.98
4	Brown University (for Ph. B.).....	120	12	10
5	Union University (for Ph. B.).....	138	18	13.04
6	Muhlenberg College (for Ph. B.).....	140	20	14.28
7	Hamilton College (for Ph. B.).....	124	24	19.34
1	Princeton University (for Litt. B.).....	126	4	3.17

## THE PRESCRIBED COLLEGE SUBJECTS FOR THE BACHELOR'S DEGREE.

## ENGLISH.

According to Table 22, English is a prescribed subject for the bachelor's degree in all State and endowed schools under discussion with the following exceptions: Cornell, Leland Stanford, Harvard, and Yale. Cornell prescribes English and history to the extent of 6 semester hours, but "each 6 hours may be entirely in one divi-

sion (for example, English 6 hours) or partly in one and partly in another (for example English 3, and history 3)."<sup>1</sup>

English may be omitted at Leland Stanford University if the student can meet certain standards, as indicated by the following:

A. *Elementary composition.* A one-semester course required of all first-year undergraduates except those who show themselves entitled to exemption.<sup>2</sup>

All first-year undergraduates (including special students, and students coming from other institutions with less than 20 units of advanced credit) will be required to satisfy the university standard in English composition. This may be done by passing a special matriculation test given during matriculation week. The examination will test the candidate's ability to write exercises not only free from marked deficiencies in spelling, punctuation, sentence structure, and paragraphing, but also of his ability to think consecutively on a simple subject. \* \* \* A student who passes this test may be exempted from composition work in the university, or may enter Course 2 in the department of English. A student who does not pass will be required to register in English A at once. Some students whose work shows exceptional promise of maturity may be assigned to English 2 instead.<sup>3</sup>

In the Yale College announcement we find the following statement:

A student entering the freshman class must choose five of the following subjects: Latin, Greek, French, German, English, mathematics, physics, chemistry, and history. The only restrictions on the choice are these: (1) The student must take either French or German, but may not take both; (2) he must take either mathematics, physics, or chemistry, but may not take both physics and chemistry.

In a similar way English may be omitted during the sophomore year.

A student at Harvard University "who passes the examination in English A satisfactorily before entering college need not take English while in college."<sup>4</sup>

Table 22 also shows the different requirements in college English according to the different degrees, beginning with the institution with the minimum requirement and concluding with the maximum. The ratio of the prescribed work in English to the total graduation requirements is given in per cent, the total graduation requirements occupying the first column of each table.

TABLE 23.—*English (semester hours).*

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	4	20	9.02	7.50	6	5.12	6	5 to 5.12
A. B. (endowed).....	4	24	9.65	7.44	6	5.00	6	5 to 5.48
B. S. (State).....	3	20	9.65	6.34	9-10	7.53	6	4.5 to 5
B. S. (endowed).....	3	24	8.65	6.68	6	5.00	6	4.4 to 5.48
B. Ed. (State).....	3	32	9.24	6.63	8	6.45	6	4.7 to 5
B. Ed. (endowed).....	6	12	8.33	6.78	6-8	6.08	6	4.8 to 5.5
Ph. B. (State).....	(10)	(10)	(10)	(7.93)	(10)	7.93	(10)	(7.93)
Ph. B. (endowed).....	6	24	14	10.67	12-18	10.51	6 or 12	4.6 to 10
Litt. B. (State).....	(8)	(8)	(8)	(6.06)	(8)	6.06	(8)	(6.06)
Litt. B. (endowed).....	(4)	(4)	(4)	(3.17)	(4)	(3.17)	(4)	(3.17)
General average.....	-----	-----	9.63	6.55	-----	-----	-----	-----

<sup>1</sup> Register of Cornell University, 1916-17.

<sup>2</sup> Leland Stanford Junior Register, 1915-16, pp. 108, 109.

<sup>3</sup> Leland Stanford Junior Register, 1915-16, p. 56.

<sup>4</sup> Extract from letter from Dean Henry A. Yeomans.

Table 23 shows that the average college requirements in English for the A. B. degree in the State schools is a little over half of a semester hour below that of the endowed schools. The B. S. and B. Ed. of the endowed schools fall about one semester below the general average. The B. Ed. is high, but no degree reaches the general average of 14 semester hours of the Ph. B. degree of the endowed schools. The Ph. B. State, and the Litt. B. both State and endowed are not included as they are represented by one institution respectively.

There are two modes for English, as is shown by the accompanying Graph 9. The following summary of the cases for these modes shows the general tendency in the number of units prescribed.

*Summary of mode.*

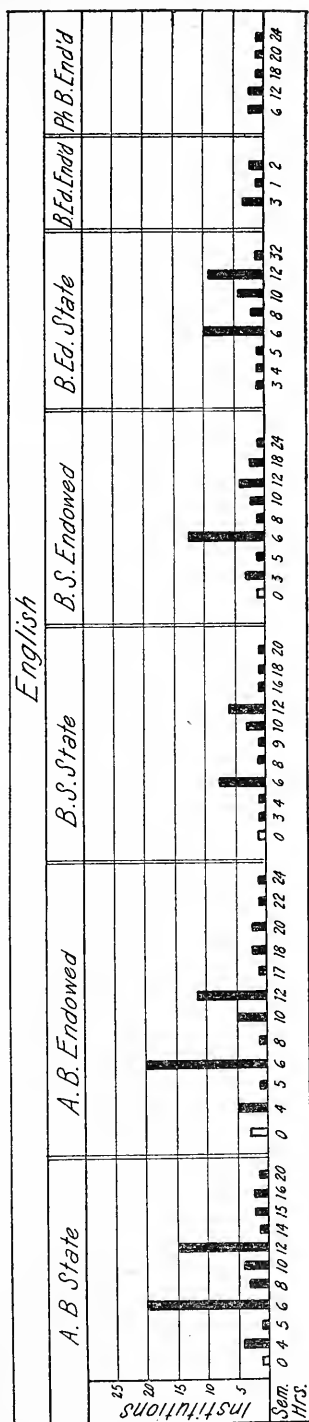
ENGLISH.

Degree.	Primary mode— 6 semester hours.	Secondary mode— 12 semester hours.	Number of cases.
A. B. (State).....	19	10	49
A. B. (endowed).....	20	11	50
B. S. (State).....	7	6	23
B. S. (endowed).....	12	4	28
B. Ed. (State).....	10	9	30
B. Ed. (endowed).....	3	2	6
Ph. B. (State).....	0	0	1
Ph. B. (endowed).....	2	2	7
Litt. B. (State).....	0	0	1
Litt. B. (endowed).....	0	0	1
Total.....	73	44	196

Accordingly in 73 out of 196 cases (38.26 per cent) the primary mode for English is 6 semester hours; in 44 out of 196 cases (22.4 per cent) the secondary mode is 12 semester hours. A comparison of these tables with those of English of the entrance requirements, shows that the college standards are far less uniform as to the quantity prescribed.

*Summary of frequencies—English.*

A. B. (STATE).	A. B. (ENDOWED).
1 requires 0 semester hours.	3 require 0 semester hours.
4 require 4 semester hours—3.25 to 3.33 per cent.	5 require 4 semester hours—3.17 to 3.38 per cent.
1 requires 5 semester hours—4.16 per cent.	1 requires 5 semester hours—3.67 per cent.
19 require 6 semester hours—4.68 to 5.12 per cent.	20 require 6 semester hours—3.48 to 5.48 per cent.
3 require 8 semester hours—6.06 to 7.48 per cent.	1 requires 8 semester hours—6.25 per cent.
4 require 10 semester hours—7.93 to 7.33 per cent.	5 require 10 semester hours—8.06 to 8.69 per cent.
10 require 12 semester hours—8.69 to 10 per cent.	11 require 12 semester hours—7.14 to 10 per cent.
1 requires 14 semester hours—11.66 per cent.	1 requires 17 semester hours—12.31 per cent.



GRAPH 9.

## A. B. (STATE)—continued.

- 2 require 15 semester hours—11.35 to 12.50 per cent.
- 2 require 16 semester hours—12.50 to 13.33 per cent.
- 1 requires 20 semester hours—13.33 per cent.

## B. S. (STATE).

- 1 requires 0 semester hours.
- 1 requires 3 semester hours—2.43 per cent.
- 1 requires 4 semester hours—3.30 per cent.
- 7 require 6 semester hours—4.54 to 5 per cent.
- 1 requires 8 semester hours—6 per cent.
- 1 requires 9 semester hours—7.50 per cent.
- 3 require 10 semester hours—7.57 to 8.33 per cent.
- 6 require 12 semester hours—8.69 to 10 per cent.
- 1 requires 16 semester hours—12.50 per cent.
- 1 requires 18 semester hours—15 per cent.
- 1 requires 20 semester hours—13.33 per cent.

## B. ED. ETC. (STATE).

- 1 requires 3 semester hours—2.50 per cent.
- 1 requires 4 semester hours—3.30 per cent.
- 1 requires 5 semester hours—3.79 per cent.
- 10 require 6 semester hours—4.76 to 5 per cent.
- 2 require 8 semester hours—6.24 to 6.66 per cent.
- 4 require 10 semester hours—7.93 to 8.33 per cent.
- 9 require 12 semester hours—8.69 to 10 per cent.
- 1 requires 32 semester hours—26.26 per cent.

## PH. B. (STATE).

- 1 requires 10 semester hours—7.93 per cent.

## LITT. B. (STATE).

- 1 requires 8 semester hours—6.06 per cent.

## A. B. (ENDOWED)—continued.

- 2 require 18 semester hours—11.84 to 14.05 per cent.
- 2 require 20 semester hours—14.28 to 16.66 per cent.
- 1 requires 22 semester hours—18.33 per cent.
- 1 requires 24 semester hours—19.34 per cent.

## B. S. (ENDOWED).

- require 4 semester hours—3.17 to 3.333 per cent.
- 1 requires 5 semester hours—3.67 per cent.
- 12 require 6 semester hours—4.47 to 5.48 per cent.
- 1 requires 8 semester hours—6.25 per cent.
- 2 require 10 semester hours—8.33 per cent.
- 4 require 12 semester hours—6.92 to 10 per cent.
- 2 require 18 semester hours—13.04 to 14.05 per cent.
- 1 requires 24 semester hours—19.34 per cent.

## B. ED. ETC. (ENDOWED).

- 3 require 6 semester hours—4.83 to 5.50 per cent.
- 1 requires 8 semester hours—6.66 per cent.
- 2 require 12 semester hours—9.08 to 10 per cent.

## PH. B. (ENDOWED).

- 2 require 6 semester hours—4.61 to 5.48 per cent.
- 2 require 12 semester hours—7.89 per cent.
- 1 requires 18 semester hours—13.04 per cent.
- 1 requires 20 semester hours—14.28 per cent.
- 1 requires 24 semester hours—19.34 per cent.

## LITT. B. (ENDOWED).

- 1 requires 4 semester hours—3.17 per cent.



TABLE 24.—College requirements in languages for the bachelor's degree.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in languages.	Per cent required in English.
1	University of Arkansas.....	126	0	0
2	University of Michigan.....	120	0	0
3	University of Nebraska.....	121	0	0
4	University of Wyoming.....	123	0	0
5	University of Colorado.....	120	0	0
6	University of Minnesota.....	120	0	0
7	University of Illinois.....	123	6	4.87
8	University of Florida.....	120	6	5.00
9	Cornell University.....	120	6	5.00
10	University of Nevada.....	120	6	5.00
11	University of California.....	117	6	5.12
12	University of Maine.....	107	6	5.61
13	University of Oklahoma.....	122	8	6.55
14	State University of Iowa.....	120	8	6.66
15	University of Missouri.....	122	10	8.19
16	University of North Dakota.....	122	10	8.19
17	University of Kansas.....	120	10	8.33
18	University of Porto Rico.....	120	10	8.33
19	University of South Carolina.....	138	12	8.69
20	Louisiana State University.....	136	12	8.82
21	University of Mississippi.....	130	12	9.23
22	Delaware College.....	128	12	9.37
23	University of South Dakota.....	128	12	9.37
24	University of Idaho.....	120	12	10.00
25	University of Montana.....	120	12	10.00
26	University of North Carolina (group 3).....	120	12	10.00
27	University of Tennessee.....	120	12	10.00
28	University of Texas.....	120	12	10.00
29	University of California.....	117	12	10.25
30	University of Kentucky.....	128	14	10.93
31	University of New Mexico.....	120	14	11.66
32	Miami University.....	120	14	11.66
33	University of Oregon.....	120	14	11.66
34	University of Utah.....	120	15	12.50
35	University of Arizona.....	120	16	13.33
36	Ohio State University.....	120	16	13.33
37	Ohio University.....	120	16	13.33
38	University of Washington.....	120	16	13.33
39	University of Wisconsin.....	120	16	13.33
40	University of Virginia.....	120	18	15.00
41	Indiana University.....	120	20	16.66
42	Washington State College.....	150	20	13.33
43	University of Vermont.....	126	20	15.87
44	West Virginia University.....	124	20	16.12
45	Rutger's College (N. J.).....	132	22	16.65
46	University of Alabama.....	120	24	20.00
47	Howard University (D. C.).....	120	24	20.00
48	College of William and Mary.....	120	24	20.00
49	University of North Carolina (group 2).....	120	26	21.66
50	University of Georgia.....	130	28	21.53
51	University of North Carolina (group 1).....	120	28	23.32
52	Pennsylvania State College.....	132	36	27.35

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Leland Stanford University.....	120	0	0
2	Western Reserve University.....	122	0	0
3	Wellesley College.....	118	0	0
4	Yale University.....	120	0	0
5	Northwestern University.....	120	6	5.00
6	Wesleyan University.....	120	6	5.00
7	Oberlin College.....	118	8	6.76
8	Colgate University.....	136	10	7.35
9	Bryn Mawr College.....	120	10	8.33
10	Catholic University of America (medical group, school of sciences).....	172	12	6.96
11	Catholic University of America (school of sciences).....	168	12	7.14
12	Catholic University of America (economics group, school of philosophy).....	166	12	7.22
13	University of Pittsburgh.....	128	12	9.37
14	Trinity College (N. C.) (group A).....	128	12	9.37
15	Vanderbilt University.....	128	12	9.37
16	Swarthmore College.....	124	12	9.67
17	Amherst College.....	122	12	9.83
18	Baker University.....	120	12	10.00

TABLE 24.—*College requirements in languages for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Hours required in languages.	Per cent required in English.
19	Beloit College.....	120	12	10.00
20	Colorado College.....	120	12	10.00
21	Dartmouth College.....	120	12	10.00
22	George Washington University (groups 3, 4, 5).....	120	12	10.00
23	Harvard University.....	120	12	10.00
24	Smith College.....	120	12	10.00
25	Tufts College.....	120	12	10.00
26	Washington University (St. Louis).....	120	12	10.00
27	Yale University.....	120	12	10.00
28	Wells College.....	115	12	10.42
29	Vassar College.....	111	12	10.90
30	Bowdoin College.....	120	14	11.76
31	Johns Hopkins University.....	125	16	12.80
32	DePauw University.....	120	16	13.33
33	Trinity College (group B).....	128	18	14.07
34	Columbia University.....	120	18	15.00
35	Earlham College.....	120	18	15.00
36	New York University.....	120	18	15.00
37	University of Pennsylvania.....	120	18	15.00
38	Syracuse University.....	120	18	15.00
39	Princeton University.....	126	20	15.87
40	Williams College.....	124	20	16.12
41	Goucher College.....	120	20	16.66
42	Grinnell College.....	120	20	16.66
43	Catholic University of America (school of philosophy).....	154	24	15.72
44	Haverford College.....	128	24	18.74
45	Tulane University (literary course).....	128	24	18.74
46	Brown University.....	120	24	20.00
47	Carleton College.....	120	24	20.00
48	George Washington University (group 2).....	120	24	20.00
49	Lafayette College.....	120	30	23.07
50	Tulane University (classical course).....	128	30	23.43
51	Washington and Lee University.....	126	30	23.81
52	George Washington University (group 1).....	120	30	25.00
53	Union University (group B).....	138	33	23.81
54	Randolph-Macon College.....	128	34	26.52
55	Muhlenberg College.....	140	36	25.71
56	Hamilton College.....	124	36	29.01
57	Union University (group A).....	138	37	26.81
58	University of the South.....	136	38	27.93
59	Catholic University of America (modern language group, school of letters).....	152	42	27.58
60	Catholic University of America (Latin historical group, school of letters).....	152	48	31.58
61	Catholic University of America (classical group, school of letters).....	152	54	35.53
62	University of Chicago.....	120	56½	46.89

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Michigan.....	120	0	0
2	University of Nebraska.....	121	0	0
3	New Hampshire College.....	132	0	0
4	Howard University (D. C.).....	120	6	5
5	University of Florida.....	120	6	5
6	University of Nevada.....	120	6	5
7	University of North Dakota.....	122	10	8.19
8	University of Porto Rico.....	120	10	8.33
9	University of South Carolina.....	138	12	8.69
10	University of Vermont.....	132	12	9.08
11	University of Mississippi.....	130	12	9.23
12	University of Arkansas.....	128	12	9.37
13	Delaware College.....	128	12	9.37
14	College of Hawaii.....	128	12	9.37
15	University of Kentucky.....	128	12	9.37
16	University of Alabama.....	120	12	10
17	University of Idaho.....	120	12	10
18	University of Virginia.....	120	12	10
19	College of William and Mary.....	120	12	10
20	Rutgers College (N. J.).....	135	14	10.59
21	University of Illinois.....	123	16	13
22	University of Arizona.....	120	16	13.33
23	University of Virginia.....	120	18	15
24	State College of Washington.....	124	20	13.33

TABLE 24.—*College requirements in languages for the bachelor's degree—Continued.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in languages.	Per cent required in English.
1	University of Chicago.....	120	0	0
2	Catholic University of America.....	173	6	3.46
3	Tufts College.....	120	6	5
4	Colgate University.....	136	10	7.35
5	Tulane University.....	142	12	8.45
6	Lafayette College.....	134	12	8.95
7	University of Pittsburgh.....	128	12	9.37
8	Beloit College.....	120	12	10
9	Carleton College.....	120	12	10
10	Columbia University.....	129	12	10
11	Dartmouth College.....	120	12	10
12	Harvard University.....	120	12	10
13	New York University.....	120	12	10
14	Syracuse University.....	120	12	10
15	Princeton University.....	126	14	11.11
16	Grinnell College.....	120	16	13.33
17	Vanderbilt University.....	128	18	14.05
18	Earlham College.....	120	18	15
19	Union University.....	138	20	14.50
20	Bowdoin College.....	120	14	11.76
21	Muhlenberg College.....	140	24	15.71
22	University of the South.....	136	24	17.64
23	Haverford College.....	128	24	18.74
24	Randolph-Macon College.....	128	24	18.74
25	Wesleyan University.....	120	24	20
26	Northwestern University.....	120	32	26.66
27	Hamilton College.....	124	36	29.01

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Arkansas.....	126	0	0
2	University of Michigan.....	120	0	0
3	University of Utah.....	120	0	0
4	University of Colorado.....	120	0	0
5	University of Nebraska.....	121	0	0
6	University of Wyoming.....	123	0	0
7	University of Minnesota.....	120	0	0
8	University of Washington.....	124	0	0
9	University of Oregon.....	120	0	0
10	University of Florida.....	120	6	5
11	University of Nevada.....	120	6	5
12	University of Oklahoma.....	128	8	6.24
13	State University of Iowa.....	120	8	6.66
14	University of Kansas.....	132	10	7.57
15	University of Missouri.....	120	10	8.33
16	University of South Carolina.....	138	12	8.69
17	Louisiana State University.....	136	12	8.82
18	University of Mississippi.....	130	12	9.23
19	University of Texas.....	126	12	9.52
20	University of Idaho.....	120	12	10
21	University of Tennessee.....	120	12	10
22	University of New Mexico.....	128	14	10.93
23	University of North Dakota.....	122	16	13.11
24	Ohio State University.....	120	16	13.33
25	Miami University.....	120	16	13.33
26	University of North Carolina.....	120	18	15
27	University of Vermont.....	126	20	15.87
28	University of Georgia.....	132	24	18.17
29	Howard University (D. C.).....	126	24	19.04

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	120	0	0
2	Columbia University.....	120	6	5
3	Tulane University.....	132	12	9.08
4	University of Pittsburgh (for B. S.).....	128	24	18.74
5	George Washington University.....	124	12	9.67
6	University of Pittsburgh (for A. B.).....	128	24	18.74
7	Johns Hopkins University and Goucher College.....	120	6	5

TABLE 24.—*College requirements in languages for the bachelor's degree—Continued.*

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES

	Institution.	Total semester hours required.	Hours required in languages.	Per cent required in English.
1	University of Vermont (for Ph. B.).....	126	12	9.52
1	Rutger's College (N. J.). (For Litt. B.).....	132	8	6.06

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago (for Ph. B.).....	120	0	0
2	Brown University (for Ph. B.).....	120	8	6.66
3	Catholic University of America (for Ph. B.).....	152	24	15.78
4	Lafayette College (for Ph. B.).....	130	24	18.45
5	Union University (for Ph. B.).....	138	34	24.63
6	Muhlenberg College (for Ph. B.).....	140	36	25.71
7	Hamilton College (for Ph. B.).....	124	36	29.01
8	Princeton University (for Litt. B.).....	126	14	11.11

## FOREIGN LANGUAGE.

## (a) FOREIGN LANGUAGE IN GENERAL.

Foreign language is prescribed for the A. B. degree by all the State schools except Arkansas, Michigan, Nebraska, Wyoming, Colorado, and Minnesota. Of the endowed institutions all prescribe it except Leland Stanford, Yale, Western Reserve, and Wellesley. (See Table 24.)

For the B. S. degree foreign language may be omitted in Michigan, Nebraska, New Hampshire, and in the University of Chicago.

For the bachelor's degree in education foreign language is not prescribed in Arkansas, Michigan, Utah, Colorado, Nebraska, Wyoming, Minnesota, Washington, and Oregon. Chicago does not prescribe it for either the degree in education or the Ph. B. degree. It is required in all other schools for both the Ph. B. and Litt. B. degrees.

TABLE 25.—*Foreign language.*

(Semester hours.)

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	6	36	15.19	13.80	12	10.00	12	8.7 to 10
A. B. (endowed).....	6	56	20.66	15.94	13	15.00	12	7.1 to 10.9
B. S. (State).....	6	20	12.09	9.58	12	9.37	12	6.9 to 10.9
B. S. (endowed).....	6	36	16.56	13.03	12	10.00	12	8.4 to 10
B. Ed. (State).....	6	24	13.04	10.69	12	9.52	12	8.7 to 10
B. Ed. (endowed).....	6	32	14.85	12.00	12	9.22	12	9.1 to 9.7
Ph. B. (State).....	(12)	(12)	(12.00)	(9.52)	(12)	(9.52)	(12)	(9.52)
Ph. B. (endowed).....	24	36	27.00	18.87	24-34	18.4 to 24.6	24 or 36	15.8 to 29
Litt. B. (State).....	(8)	(8)	(8.00)	(6.06)	(8)	(6.06)	(8)	(6.06)
Litt. B. (endowed).....	(14)	(14)	(14.00)	(11.11)	(14)	(11.11)	(14)	(11.11)
General average.....			16.82	13.71				

A study of Table 25 and Graph 10 reveals the following tendencies: The endowed schools compared with the State institutions show a distinct tendency to higher standards in language requirements for all degrees, if we consider the averages.

The B. S. degree both of State and endowed schools shows a tendency to lower standards in language requirements. This observation is also true for the B. Ed. degrees.

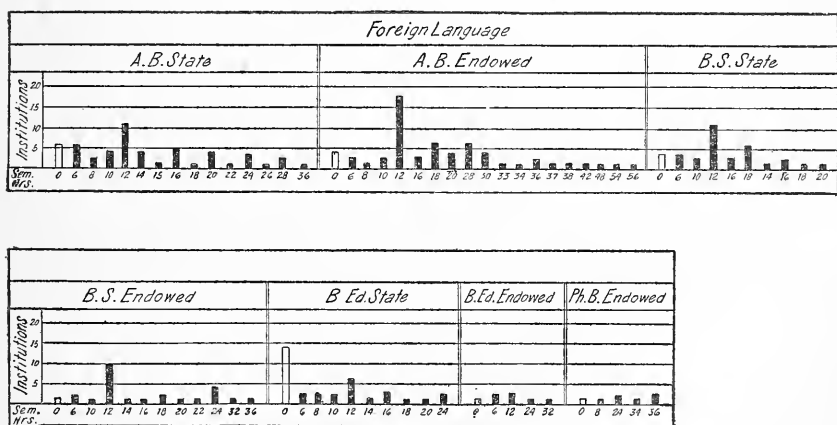
The variation in standards of quantity of prescribed foreign language is perhaps greater than any other study prescribed. There are 14 different standards in foreign language for the A. B. degree in the State schools and 18 in those which are endowed. The mode—12 semester hours, including both State and endowed schools—represents from one-fourth to nearly two-fifths of all the instances. It is also noticeable that there is an increase in the number of frequencies when the standard is 6 or a multiple of 6. There are, of course, exceptions to this.

For the B. S. degree the mode 12 represents from one-third to one-half of the instances in the State and in the endowed schools.

For the B. Ed. degrees the frequencies are more widely distributed, the central tendency not being so strong.

The requirements for the Ph. B. degree of endowed schools show a very high standard in language, being about double that of the average tendency of other degrees.

The requirements in language for the Litt. B. degree are lower than the average.



GRAPH 10.

*The mode.*

## FOREIGN LANGUAGE.

Degree.	Number of schools 6 semester hours.	Number of schools 12 semester hours.	Number of schools 18 semester hours.	Number of cases.
A. B. (State).....	6	11	1	43
A. B. (endowed).....	2	18	6	46
B. S. (State).....	3	11	6	18
B. S. (endowed).....	2	10	2	26
B. Ed (State).....	2	6	1	21
B. Ed. (endowed).....	2	3	0	7
Ph. B. (State).....	0	1	0	1
Ph. B. (endowed).....	0	0	0	7
Litt. B. (State).....	0	0	0	1
Litt. B. (endowed).....	0	0	0	1
Total.....	17	60	16	171

In 17 schools (9.94 per cent) 6 semester hours are prescribed; in 60 schools (35.1 per cent) 12 semester hours are prescribed; in 16 schools (9.35 per cent) 18 semester hours are prescribed.

*Summary.*

## A. B. (STATE).

6 require 0 semester hours.  
 6 require 6 semester hours—4.87 to 5.61 per cent.  
 2 require 8 semester hours—6.55 to 6.66 per cent.  
 4 require 10 semester hours—8.19 to 8.33 per cent.  
 11 require 12 semester hours—8.69 to 10 per cent.  
 4 require 14 semester hours—10.93 to 11.66 per cent.  
 1 requires 15 semester hours—12.50 per cent.  
 5 require 16 semester hours—13.33 per cent.  
 1 requires 18 semester hours—15 per cent.  
 4 require 20 semester hours—13.33 to 16.66 per cent.  
 1 requires 22 semester hours—16.66 per cent.  
 3 require 24 semester hours—20 per cent.  
 1 requires 26 semester hours—21.66 per cent.  
 2 require 28 semester hours—21.57 to 23.33 per cent.  
 1 requires 36 semester hours—27.35 per cent.

## A. B. (ENDOWED).

4 require 0 semester hours.  
 2 require 6 semester hours—6.76 per cent.  
 2 require 10 semester hours—7.35 to 8.33 per cent.  
 18 require 12 semester hours—7.14 to 10.90 per cent.  
 2 require 16 semester hours—12.80 to 13.33 per cent.  
 6 require 18 semester hours—14.07 to 15 per cent.  
 4 require 20 semester hours—15.87 to 16.66 per cent.  
 6 require 28 semester hours—15.72 to 20 per cent.  
 4 require 30 semester hours—23.07 to 25 per cent.  
 1 requires 33 semester hours—23.81 per cent.  
 1 requires 34 semester hours—26.53 per cent.  
 2 require 36 semester hours—25.71 to 29.01 per cent.  
 1 requires 37 semester hours—26.81 per cent.  
 1 requires 38 semester hours—27.93 per cent.  
 1 requires 42 semester hours—27.58 per cent.  
 1 requires 48 semester hours—31.58 per cent.  
 1 requires 54 semester hours—35.53 per cent.  
 1 requires 56 semester hours—46.84 per cent.

## B. S. (STATE).

- 3 require 0 semester hours.
- 3 require 6 semester hours—5 per cent.
- 2 require 10 semester hours—8.19 to 8.33 per cent.
- 11 require 12 semester hours—6.96 to 10.90 per cent.
- 2 require 16 semester hours—12.80 to 13.33 per cent.
- 6 require 18 semester hours—14.07 to 15 per cent.
- 1 requires 14 semester hours—10.59 per cent.
- 2 require 16 semester hours—13 to 13.33 per cent.
- 1 requires 18 semester hours—15 per cent.
- 1 requires 20 semester hours—13.33 per cent.

## B. ED. ETC. (STATE).

- 9 require 0 semester hours.
- 2 require 6 semester hours—5 per cent.
- 2 require 8 semester hours—6.24 to 6.66 per cent.
- 2 require 10 semester hours—7.57 to 8.33 per cent.
- 6 require 12 semester hours—8.69 to 10 per cent.
- 1 requires 14 semester hours—10.93 per cent.
- 3 require 16 semester hours—13.11 to 13.33 per cent.
- 1 requires 18 semester hours—15 per cent.
- 1 requires 20 semester hours—15.87 per cent.
- 2 require 24 semester hours—18.17 to 19.04 per cent.

## PH. B. (STATE).

- 1 requires 12 semester hours—9.52 per cent.

## LITT. B. (STATE).

- 1 requires 8 semester hours—6.06 per cent.

## B. S. (ENDOWED).

- 1 requires 0 semester hours.
- 2 require 6 semester hours—3.46 to 5 per cent.
- 1 requires 10 semester hours—7.35 per cent.
- 10 require 12 semester hours—8.45 to 10 per cent.
- 1 requires 14 semester hours—11.11 per cent.
- 1 requires 16 semester hours—13.33 per cent.
- 2 require 18 semester hours—14.05 to 15 per cent.
- 1 requires 20 semester hours—14.50 per cent.
- 1 requires 22 semester hours—15.71 per cent.
- 4 require 24 semester hours—17.67 to 20 per cent.
- 1 requires 32 semester hours—26.66 per cent.
- 1 requires 36 semester hours—29.01 per cent.

## B. ED. ETC. (ENDOWED).

- 1 requires 0 semester hours.
- 1 requires 6 semester hours—5 to 5.50 per cent.
- 3 require 12 semester hours—9.08 to 9.67 per cent.
- 1 requires 24 semester hours—18.74 per cent.
- 1 requires 32 semester hours—26.66 per cent.

## PH. B. (ENDOWED).

- 1 requires 8 semester hours—6.66 per cent.
- 2 require 24 semester hours—15.78 to 18.45 per cent.
- 1 requires 34 semester hours—24.63 per cent.
- 2 require 36 semester hours—29.01 per cent.

## LITT. B. (ENDOWED).

- 1 requires 14 semester hours—11.11 per cent.

## (b) LATIN AND GREEK.

Either an option of Latin or Greek, or both Latin and Greek, are required for the A. B. degree in 13 of the 43 State schools (30.2 per cent) and in 25 of the 46 endowed schools (54.3 per cent) of our list. Latin and Greek considered as a single subject are not prescribed by any of the schools under discussion for the A. B. degree.

According to Table 26, Latin and Greek are prescribed together or as options by two State and eight endowed schools. The number of schools prescribing both Latin and foreign language, ancient and and foreign language, or ancient and modern language are six in each case. The only combination which is prescribed for the B. S., Ph. B., and Litt. B. degrees is the Latin and foreign language combination, although one school combines both Greek and Latin with foreign or modern languages. Greek is prescribed in combination or as an option for the A. B. degree by 10 State and 22 endowed schools.

The number of semester hours required in ancient language alone or in combination with foreign language varies from 6 to 28 semester hours, University of Chicago excepted. The tendency is, however, to prescribe two years in these subjects.

Of the 13 States and 25 endowed schools mentioned, 13 are in the south and south central part of the United States, 18 are in the east and New England, while 7 are in the middle and far west.

TABLE 26.—*College requirements in Latin and Greek.*

## STATE.

Latin only.	Latin and Greek, or Latin or Greek.	Latin and foreign language.	Ancient and foreign.	Ancient and modern.
None.	Howard (D. C.). Virginia.	Georgia. Kentucky. Rutgers, B. S. Vermont, Ph. B. William and Mary.	Kansas. Missouri. Rutgers. North Carolina. North Carolina, Group 2. Vermont.	Alabama. California.
	2	3 A. B., 1 B. S., 1 Ph. B.	6	2

## ENDOWED.

None.	Amherst. Chicago. Colgate. New York. Trinity. Tulane. Vanderbilt. Wesleyan.	George Washington. Grinnell. Hamilton, B. S. Muhlenburg, Ph. B. Northwestern. Princeton. Trinity, Group 2. Vanderbilt, B. S. Wells.	Bowdoin. Bowdoin, B. S. Muhlenburg. Pennsylvania. Pittsburgh. Smith. Union.	Baker. Dartmouth. Hamilton. Princeton. Tufts. Vassar.
	8	6 A. B., 2 B. S., 1 Ph. B.	6 A. B., 1 B. S.	6



TABLE 27.—*College requirements in mathematics for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total hours.	Semester hours required in mathematics.	Per cent required in mathematics.
1	University of Arkansas.....	126	0	0
2	University of Michigan.....	120	0	0
3	University of Nebraska.....	121	0	0
4	University of Wyoming.....	123	0	0
5	State University of Iowa.....	120	0	0
6	University of Maine.....	120	0	0
7	University of Nevada.....	120	0	0
8	University of Oregon.....	120	0	0
9	University of Porto Rico.....	120	0	0
10	University of South Dakota.....	128	0	0
11	University of Wisconsin.....	120	0	0
12	University of Colorado.....	120	0	0
13	University of Minnesota.....	120	0	0
14	Cornell University.....	120	0	0
15	University of New Mexico.....	120	0	0
16	University of Arizona.....	120	0	0
17	University of Montana.....	120	0	0
18	Indiana University.....	120	0	0
19	Ohio State University.....	120	0	0
20	Ohio University.....	120	0	0
21	University of Oklahoma.....	122	0	0
22	State College of Washington.....	150	0	0
23	University of North Dakota.....	122	0	0
24	University of Kentucky.....	128	0	0
25	Miami University.....	120	0	0
26	University of Idaho.....	120	0	0
27	Pennsylvania State College.....	132	0	0
28	University of Missouri.....	122	3	2.45
29	University of Utah.....	120	4	3.33
30	University of Washington.....	120	4	3.33
31	University of Kansas.....	120	5	4.16
32	Louisiana State University.....	136	6	4.41
33	University of Mississippi.....	130	6	4.61
34	University of Alabama.....	120	6	5.00
35	Howard University.....	120	6	5.00
36	University of Florida.....	120	6	5.00
37	University of Tennessee.....	120	6	5.00
38	University of Texas.....	120	6	5.00
39	University of California.....	117	6	5.12
40	College of William and Mary.....	120	7	5.82
41	Rutgers College.....	132	8	6.06
42	Delaware College.....	128	8	6.25
43	University of Vermont.....	126	8	6.34
44	University of Illinois.....	123	8	6.50
45	University of North Carolina.....	120	8	6.66
46	University of Georgia.....	130	12	9.23
47	University of South Carolina.....	138	12	8.69

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total hours.	Semester hours required in mathematics.	Per cent required in mathematics.
1	Leland Stanford University.....	120	0	0
2	Bowdoin College.....	120	0	0
3	University of Chicago.....	120	0	0
4	De Pauw University.....	120	0	0
5	Harvard University.....	120	0	0
6	University of Pennsylvania.....	120	0	0
7	University of Pittsburgh.....	128	0	0
8	Yale University.....	120	0	0
9	Colgate University.....	136	0	0
10	Washington University (St. Louis).....	120	0	0
11	Bryn Mawr College.....	120	0	0
12	Beloit College.....	120	0	0
13	Wesleyan University.....	120	0	0
14	George Washington University.....	120	0	0
15	Goucher College.....	120	0	0
16	Oberlin College.....	118	0	0
17	Johns Hopkins University.....	125	0	0
18	Smith College.....	120	0	0
19	Earlham College.....	120	4	3.33
20	Columbia University.....	120	5	4.16
21	Catholic University of America (medical group, school of sciences).....	172	6	3.48
22	Catholic University of America (economics group, school of philosophy).....	166	6	3.66
23	Catholic University of America (school of letters).....	152	6	3.94
24	University of the South.....	136	6	4.41

TABLE 27.—*College requirements in mathematics for the bachelor's degree—Continued.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total hours.	Semester hours required in mathematics.	Per cent required in mathematics.
25	Lafayette College.....	130	6	4.61
26	Trinity College.....	128	6	4.68
27	Washington and Lee University.....	126	6	4.76
28	Hamilton College.....	124	6	4.84
29	Swarthmore College.....	124	6	4.84
30	Western Reserve University.....	122	6	4.91
31	Baker University.....	120	6	5.00
32	Brown University.....	120	6	5.00
33	Dartmouth College.....	120	6	5.00
34	George Washington University (groups 1, 4, 5).....	120	6	5.00
35	Grinnell College.....	120	6	5.00
36	New York University.....	120	6	5.00
37	Northwestern University.....	120	6	5.00
38	Syracuse University.....	120	6	5.00
39	Tufts College.....	120	6	5.00
40	Wellesley College.....	118	6	5.08
41	Wells College.....	115	6	5.22
42	Vassar College.....	111	6	5.45
43	Union University.....	138	8	5.80
44	Haverford University.....	128	8	6.25
45	Vanderbilt University.....	128	8	6.25
46	Princeton University.....	126	8	6.34
47	Williams College.....	124	8	6.45
48	Amherst College.....	122	8	6.56
49	Carleton College.....	120	8	6.66
50	Colorado College.....	120	8	6.66
51	Catholic University of America (school of sciences).....	168	10	5.95
52	Muhlenberg College.....	140	10	7.14
53	Randolph-Macon College.....	128	10	7.81
54	Tulane University.....	128	10	7.81
55	George Washington University (group 3).....	120	12	10.00

FOR B. S. FROM STATE UNIVERSITIES.

1	University of Michigan.....	120	0	0
2	University of Nebraska.....	121	0	0
3	New Hampshire College.....	132	0	0
4	University of Nevada.....	120	0	0
5	University of Porto Rico.....	120	0	0
6	State College of Washington.....	150	0	0
7	College of Hawaii.....	128	0	0
8	University of North Dakota.....	122	0	0
9	University of Mississippi.....	130	6	4.61
10	Howard University.....	120	6	5.00
11	University of Florida.....	120	6	5.00
12	Rutgers College (N. J.).....	135	8	6.06
13	University of Arkansas.....	128	8	6.25
14	Delaware College.....	128	8	6.25
15	University of Illinois.....	123	8	6.50
16	University of Arizona.....	120	8	6.66
17	University of Idaho.....	120	8	6.66
18	University of Kentucky.....	128	10	7.81
19	University of Alabama.....	120	10	8.33
20	College of William and Mary.....	120	10	8.33
21	University of South Carolina.....	138	12	8.69
22	University of Virginia.....	120	12	10
23	University of Vermont.....	132	14	10.60

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Harvard University.....	120	0	0
2	University of Pittsburgh.....	128	0	0
3	University of Chicago.....	120	0	0
4	Beloit College.....	120	0	0
5	Earlham College.....	120	4	3.33
6	Columbia University.....	120	5	4.16
7	Hamilton College.....	124	6	4.84
8	Dartmouth College.....	120	6	5.00
9	Grinnell College.....	120	6	5.00
10	New York University.....	120	6	5.00
11	Northwestern University.....	120	6	5.00
12	Syracuse University.....	120	6	5.00

TABLE 27.—*College requirements in mathematics for the bachelor's degree—Continued.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total hours.	Semester hours required in mathematics.	Per cent required in mathematics.
13	Tufts College.....	120	6	5.00
14	Wesleyan University.....	120	6	5.00
15	Carleton College.....	120	8	6.66
16	Haverford College.....	128	8	6.25
17	Princeton University.....	126	8	6.34
18	Vanderbilt University.....	128	8	6.25
19	Colgate University.....	136	10	7.35
20	Muhlenberg College.....	140	10	7.14
21	Randolph-Macon College.....	128	10	7.81
22	Lafayette College.....	134	12	8.95
23	University of the South.....	136	12	8.82
24	Union University.....	138	16	11.60
25	Catholic University of America (school of sciences).....	173	18	11.40
26	Tulane University.....	142	20	14.08

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Arkansas.....	120	0	0
2	University of Michigan.....	120	0	0
3	University of Utah.....	120	0	0
4	University of Nevada.....	120	0	0
5	University of Colorado.....	120	0	0
6	University of Nebraska.....	121	0	0
7	University of Florida.....	120	0	0
8	University of Wyoming.....	123	0	0
9	University of Minnesota.....	120	0	0
10	Miami University.....	120	0	0
11	University of New Mexico.....	128	0	0
12	University of Idaho.....	120	0	0
13	University of North Dakota.....	122	0	0
14	University of Washington.....	124	0	0
15	University of Oregon.....	120	0	0
16	Ohio State University.....	120	0	0
17	University of Oklahoma.....	128	0	0
18	University of Missouri.....	123	3	2.50
19	University of Kansas.....	132	5	3.79
20	Louisiana State University.....	136	6	4.41
21	University of Mississippi.....	130	6	4.61
22	Howard University.....	126	6	4.76
23	University of Texas.....	126	6	4.76
24	University of Tennessee.....	120	6	5.00
25	University of Vermont.....	126	8	6.34
26	University of North Carolina.....	120	8	6.66
27	University of South Carolina.....	138	12	8.69
28	University of Georgia.....	132	12	9.09

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	132	10	7.51
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## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	126	8	6.34
1	Rutgers College (N. J.) (for Litt. B.).....	132	8	6.06

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (for Ph. B.).....	152	6	3.94
2	Lafayette College (for Ph. B.).....	130	6	4.61
3	Hamilton College (for Ph. B.).....	124	6	4.84
4	Union University (for Ph. B.).....	138	8	5.80
5	Muhlenberg College (for Ph. B.).....	140	10	7.14
1	Princeton University (for Litt. B.).....	126	8	6.34

## MATHEMATICS.

According to Table 27, 20 out of the 49 State schools under discussion prescribe mathematics for the A. B. degree. The schools not prescribing it are 27 in number: Arkansas, Michigan, Nebraska, Wyoming, Iowa, Maine, Nevada, Oregon, Porto Rico, South Dakota, Wisconsin, Colorado, Minnesota, Cornell, N. Y., New Mexico, Arizona, Montana, Indiana, Ohio State, Ohio, Oklahoma, State College of Washington, North Dakota, Kentucky, Miami, Idaho, and Pennsylvania State College (classical course).

Of the 50 endowed schools, 32 require mathematics for the A. B. degree. The 18 institutions not prescribing it are: Leland Stanford, Bowdoin, Chicago, De Pauw, Harvard, Pennsylvania, Pittsburgh, Yale, Colgate, Washington (St. Louis), Bryn Mawr, Beloit, Wesleyan, George Washington (modern language group), Goucher, Oberlin, Johns Hopkins, and Smith.

Fifteen out of 23 State schools and 23 out of 28 endowed schools, which offer the B. S. degree, require mathematics. The 8 State schools which do not prescribe it are: Michigan, Nebraska, New Hampshire, Nevada, Porto Rico, State College of Washington, Hawaii, and North Dakota; also Harvard, Pittsburgh, Chicago, and Beloit of the endowed institutions.

Seventeen out of 30 State schools, and 1 out of 6 endowed schools which offer the B. Ed. degree, prescribe mathematics. The institutions not prescribing this subject are: Arkansas, Michigan, Utah, Nevada, Colorado, Nebraska, Florida, Wyoming, Minnesota, Miami, New Mexico, Idaho, North Dakota, Washington, Oregon, Ohio, and Oklahoma; also Chicago, Johns Hopkins, Goucher, George Washington, Columbia, and Pittsburgh.

Mathematics is required for the Ph. B. at the University of Vermont, and for the Litt. B. at Rutgers College. It is not required for the Ph. B. at Chicago or Brown Universities but is required for the Litt. B. at Princeton.

TABLE 28.—*Mathematics.*

[Semester hours.]

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	3	12	7.00	5.61	6	5.00	6	4.4 to 5.12
A. B. (endowed).....	4	12	6.94	5.46	6	5.00	6	3.5 to 5.4
B. S. (State).....	6	14	8.93	7.11	8	6.60	8	6.06 to 6.66
B. S. (endowed).....	4	20	8.56	6.77	8	6.66	6	4.8 to 5
B. Ed. (State).....	3	12	7.09	5.51	6	4.76	6	4.4 to 5
B. Ed. (endowed).....	(10)	(10)	(10.00)	(7.57)	(10)	(7.57)	(10)	(7.57)
Ph. B. (State).....	(8)	(8)	(8.00)	(6.34)	(8)	(6.34)	(8)	(6.34)
Ph. B. (endowed).....	6	10	7.20	5.26	6	4.72	6	3.9 to 4.8
Litt. B. (State).....	(8)	(8)	(8.00)	(6.06)	(8)	(6.06)	(8)	(6.06)
Litt. B. (endowed).....	(8)	(8)	(8.00)	(6.06)	(8)	(6.34)	(8)	(6.34)
General average.....			7.61	5.99				

According to Table 28, the averages for the A. B. degrees, both State and endowed, and for education, maintain about the same level. However, there is a marked increase in the mathematics requirement for the B. S. degree, both State and endowed. This increase is generally true as evidenced by the agreement between the average, median, and mode.

With the exception of the Ph. B. of the endowed schools, the tendency for the Ph. B. and Litt. B. is toward the level of the B. S. degree or eight semester hours.

Graph 11 (p. 106) shows that there is less uniformity of standards for the mathematics than for English. Six and 8 semester hours seem to prevail, although 10 semester hours is found in a number of instances.

*Summary of the mode.*

MATHEMATICS.

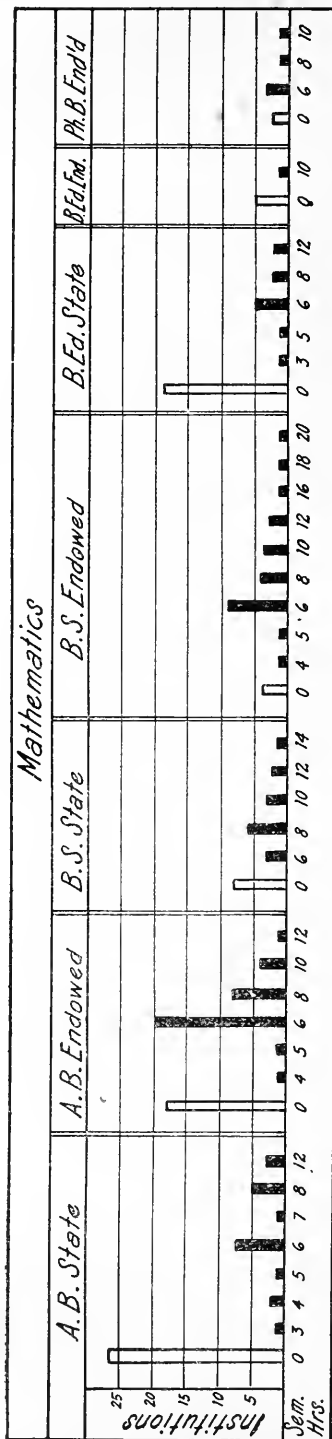
Degree.	Primary mode—6 semester hours.	Secondary mode—8 semester hours.	Number of cases.
A. B. (State).....	12	5	31
A. B. (endowed).....	20	8	38
B. S. (State).....	3	6	15
B. S. (endowed).....	8	4	23
B. Ed. (State).....	5	2	11
B. Ed. (endowed).....	0	0	1
Ph. B. (State).....	0	1	1
Ph. B. (endowed).....	3	1	5
Litt. B. (State).....	0	1	1
Litt. B. (endowed).....	0	1	1
Total.....	51	29	127

Accordingly in 51 out of 127 cases (40.16 per cent) the primary mode for mathematics is 6 semester hours; in 29 out of 127 cases (22.8 per cent) the secondary mode is 8 semester hours.

A comparison of the entrance requirements in mathematics with the corresponding college requirements shows that a much greater uniformity of standards exists in the entrance work of this subject.

*Summary of frequencies.*

A. B. (STATE).	A. B. (ENDOWED).
29 require 0 semester hours.	18 require 0 semester hours.
1 requires 3 semester hours—2.46 per cent.	1 requires 4 semester hours—3.33 per cent.
2 require 4 semester hours—3.33 per cent.	1 requires 5 semester hours—4.16 per cent.
1 requires 5 semester hours—4.16 per cent.	20 require 6 semester hours—3.48 to 5.45 per cent.
8 require 6 semester hours—4.41 to 5.12 per cent.	8 require 8 semester hours—5.80 to 6.66 per cent.
1 requires 7 semester hours—5.82 per cent.	4 require 10 semester hours—5.95 to 7.81 per cent.
5 require 8 semester hours—6.25 to 6.66 per cent.	1 requires 12 semester hours—10 per cent.
3 require 12 semester hours—8.69 to 10 per cent.	



GRAPH 11.

*Summary of frequencies—Continued.*

## B. S. (STATE).

- 8 require 0 semester hours.
- 3 require 6 semester hours—4.61 to 5 per cent.
- 6 require 8 semester hours—6.06 to 6.66 per cent.
- 3 require 10 semester hours—7.81 to 8.33 per cent.
- 2 require 12 semester hours—8.69 to 10 per cent.
- 1 requires 14 semester hours—10.60 per cent.

## B. ED., ETC. (STATE).

- 19 require 0 semester hours.
- 1 requires 3 semester hours—2.50 per cent.
- 1 requires 5 semester hours—3.79 per cent.
- 5 require 6 semester hours—4.41 to 5 per cent.
- 2 require 8 semester hours—6.34 to 6.66 per cent.
- 2 require 12 semester hours—8.69 to 9.09 per cent.

## PH. B. (STATE).

- 1 requires 8 semester hours—6.34 per cent.

## LITT. B. (STATE).

- 1 requires 8 semester hours—6.34 per cent.

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## B. S. (ENDOWED).

- 5 require 0 semester hours.
- 1 requires 4 semester hours—3.33 per cent.
- 1 requires 5 semester hours—4.16 per cent.
- 8 require 6 semester hours—4.84 to 5 per cent.
- 4 require 8 semester hours—6.25 to 6.66 per cent.
- 3 require 10 semester hours—7.14 to 7.81 per cent.
- 2 require 12 semester hours—8.82 to 8.95 per cent.
- 1 requires 16 semester hours—11.60 per cent.
- 1 requires 18 semester hours—11.40 per cent.
- 1 requires 20 semester hours—14.08 per cent.

## B. ED., ETC. (ENDOWED).

- 5 require 0 semester hours.
- 1 requires 10 semester hours—7.57 per cent.

## PH. B. (ENDOWED).

- 2 require 0 semester hours.
- 3 require 6 semester hours—3.94 to 4.84 per cent.
- 1 requires 8 semester hours—5.80 per cent.
- 1 requires 10 semester hours—7.14 per cent.

## LITT. B. (ENDOWED).

- 1 requires 8 semester hours—6.34 per cent.

TABLE 29.—*College requirements in science for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in science.	Per cent required in science.
1	Indiana University.....	120	1	0.83
2	University of South Carolina.....	138	6	4.35
3	Pennsylvania State College.....	132	6	4.54
4	University of Georgia.....	130	6	4.61
5	University of Montana.....	120	6	5.00
6	Cornell University.....	120	6	5.00
7	University of Kentucky.....	128	7	5.47
8	Rutgers College (N. J.).....	132	8	6.06
9	West Virginia University.....	124	8	6.45
10	University of Illinois.....	123	8	6.50
11	University of Oklahoma.....	122	8	6.55
12	University of Arizona.....	120	8	6.66
13	Miami University.....	120	8	6.66
14	University of California (plan A).....	117	9	7.68
15	University of Missouri.....	132	10	8.19
16	University of Kansas.....	120	10	8.33
17	Delaware College.....	128	12	9.37
18	University of Utah.....	120	12	10
19	University of Minnesota.....	120	12	10
20	University of North Carolina (group 3).....	120	12	10
21	University of Texas.....	120	12	10
22	University of California (plan B).....	117	12	10.25
23	University of Idaho.....	120	14	11.66
24	State College of Washington.....	150	15	10
25	College of William and Mary.....	120	15	12.50
26	University of North Dakota.....	122	16	13.11
27	Louisiana State University.....	136	18	13.23
28	University of Alabama.....	120	16	13.33
29	University of Washington.....	120	16	13.33
30	University of Mississippi.....	130	18	13.84
31	Ohio State University.....	120	18	15
32	Ohio University.....	120	18	15
33	University of Virginia.....	120	24	30

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in science.	Per cent required in science.
1	Hamilton College.....	124	2	1.61
2	Columbia University.....	120	3	2.50
3	Union University.....	138	4	2.90
4	University of the South.....	136	6	4.41
5	Johns Hopkins University.....	125	6	4.80
6	Swarthmore College.....	124	6	4.84
7	Beloit College.....	120	6	5
8	Brown University.....	120	6	5
9	Colorado College.....	120	6	5
10	George Washington University (group 2).....	120	6	5
11	Grinnell College.....	120	6	5
12	Syracuse University.....	120	6	5
13	Tufts College.....	120	6	5
14	Washington University.....	120	6	5
15	Yale University.....	120	6	5
16	Oberlin College.....	118	6	5.20
17	Wellesley College.....	118	6	5.20
18	Vassar College.....	111	6	5.45
19	Muhlenberg College.....	140	8	5.71
20	Princeton University.....	126	8	6.34
21	Northwestern University.....	120	8	6.66
22	Catholic University of America.....	166	10	6.02
23	Catholic University of America (school of philosophy).....	154	10	6.56
24	Colgate University.....	136	10	7.35
25	Tulane University.....	128	10	7.81
26	Bryn Mawr College.....	120	10	8.33
27	Lafayette College.....	130	11	8.45
28	Catholic University of America (school of letters).....	152	12	7.89
29	Vanderbilt University.....	128	12	9.37
30	Amherst College.....	122	12	9.83
31	Baker University.....	120	12	10
32	Goucher College.....	120	12	10
33	New York University.....	120	12	10
34	Wells College.....	115	12	10.42
35	George Washington University (group 3).....	120	18	15
36	Catholic University of America.....	168	32	19.04
37	George Washington University (group 4).....	120	40	33.3
38	Catholic University of America (medical group, school of sciences).....	172	76	44.15



TABLE 29.—*College requirements in science for the bachelor's degree—Continued.*

## FOR B. S. FROM STATE UNIVERSITIES.

	Institution.	Total semester hours required.	Hours required in science.	Per cent required in science.
1	University of South Carolina.....	138	6	4.35
2	University of Florida.....	120	6	5.00
3	Delaware College.....	128	12	9.37
4	College of Hawaii.....	128	12	9.37
5	State College of Washington.....	150	15	10
6	Rutgers College (N. J.).....	135	16	12.12
7	University of Illinois.....	123	16	13.00
8	University of North Dakota.....	122	16	13.11
9	University of Arizona.....	120	16	13.33
10	University of Idaho.....	120	16	13.33
11	University of Mississippi.....	130	18	13.84
12	University of Vermont.....	132	24	18.16
13	University of Virginia.....	120	24	20.16
14	University of Alabama.....	120	32	26.6
15	College of William and Mary.....	120	35	29.15
16	Howard University (D. C.).....	120	36	30
17	University of Kentucky.....	128	39	30.46

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College.....	124	2	1.61
2	Beloit College.....	120	6	5
3	Grinnell College.....	120	6	5
4	Syracuse University.....	120	6	5
5	Tufts College.....	120	6	5
6	Columbia University.....	120	8	6.66
7	Princeton University.....	126	10	7.93
8	Lafayette College.....	134	11	8.20
9	Vanderbilt University.....	128	12	9.37
10	New York University.....	120	12	10
11	Colgate University.....	136	15	11.02
12	Union University.....	138	16	11.60
13	Northwestern University.....	120	16	13.33
14	University of the South.....	136	24	17.64
15	Tulane University.....	142	30	21.13
16	Catholic University of America (school of sciences).....	173	32	18.49
17	Muhlenberg College.....	140	58	41.42
18	University of Chicago.....	120	63½	52.37

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	126	6	4.76
2	University of Wyoming.....	123	6	4.87
3	University of North Carolina.....	120	6	5.00
4	University of Oklahoma.....	128	8	6.24
5	University of Washington.....	124	8	6.85
6	University of Idaho.....	120	8	6.66
7	Ohio State University.....	120	8	6.66
8	Miami University.....	120	8	6.66
9	University of Kansas.....	132	10	7.57
10	University of Missouri.....	120	10	8.33
11	University of South Carolina.....	138	12	8.69
12	University of Georgia.....	132	12	9.09
13	University of Texas.....	126	12	9.52
14	University of Minnesota.....	120	12	10
15	University of North Dakota.....	122	16	13.11
16	Louisiana State University.....	136	18	13.23
17	University of Mississippi.....	130	24	18.46

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh (for A. B.).....	128	6	4.66
2	George Washington University.....	124	6	4.83
3	Johns Hopkins University and Goucher College.....	120	6	5
4	Columbia University.....	120	8	6.66
5	University of Pittsburgh (for B. S.).....	128	18	14.05
6	Tulane University.....	132	20	15.20

TABLE 29—*College requirements in science for the bachelor's degree*—Continued.

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in science.	Per cent required in science.
1	Rutgers College (New Jersey) (for Litt. B.).....	132	8	6.06

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College (for Ph. B.).....	124	2	1.61
2	Union University (for Ph. B.).....	138	4	2.90
3	Muhlenberg College (for Ph. B.).....	140	8	5.71
4	Catholic University of America (for Ph. B.).....	152	10	6.57
5	Lafayette College (for Ph. B.).....	130	11	8.45
6	Brown University (for Ph. B.).....	130	12	10

## SCIENCE.

According to Table 29, science is prescribed for the A. B. degree by 23 out of 49 State schools and 33 out of 50 endowed schools; 18 out of 22 State schools and 18 out of 30 endowed schools, require it for the B. S. degree. It should be understood, however, that if science does not appear in the list of prescribed subjects in certain instances, it is required as a major elective. Seventeen out of 30 State schools and all 6 of the endowed schools prescribe it for the educational degree. For the Ph. B. degree, science is not required by the University of Vermont, but 6 of the 7 endowed schools require it. Science is required for the Litt. B. degree by Rutgers and Princeton.

TABLE 30.—*Science.*

• [Semester hours.]

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	1	24	11.48	9.19	8	6.50	8 or 12	6 to 10.25
A. B. (endowed).....	2	76	11.44	8.52	8	5.71	6	4.4 to 5.4
B. S. (State).....	6	39	22.38	19.51	16	13.06	16	12 to 13.3
B. S. (endowed).....	2	63	18.50	13.93	12	9.37	6	5.00
B. Ed. (State).....	6	24	10.82	8.57	8-10	.....	8	6.2 to 6.6
B. Ed. (endowed).....	6	20	10.66	8.40	.....	.....	6	4.6 to 5
Ph. B. (State).....	.....	.....	.....	.....	.....	.....	.....	.....
Ph. B. (endowed).....	2	11	7.00	5.05	8-10	6.14	None.	None.
Litt. B. (State).....	(8)	(8)	(8.00)	(6.06)	(8.00)	(6.06)	(8)	(6.06)
Litt. B. (endowed).....	(10)	(10)	(10.00)	(7.93)	(7.93)	(10.00)	(10)	(7.93)
General average.....	.....	.....	13.49	10.70	.....	.....	.....	.....

Table 30 indicates that approximately twice as much science is prescribed for the B. S. degree both State and endowed, as for the A. B. or any other cultural degree. It is of interest to note, however, that the maximum requirements in science are required by the A. B. and B. S. courses of certain endowed schools.

The modes in science for the A. B. degree are small in State schools; but the mode in endowed schools involves 15 out of 22 instances.

Graph 12 (p. 112) shows that the modes are weak for the B. S., B. Ed., and Ph. B. degrees, the distribution being well scattered.

In a word, no single number of semester hours in science greatly predominates in the A. B. course of the State schools, 6, 8, and 12 semester hours having a good representation. In the endowed schools 6 and 12 semester hours are more dominant. The distribution of standards in college science is much greater than that of the entrance requirements in that subject.

*Summary of the mode.*

SCIENCE.

Degree.	Primary mode—6 semester hours.	Secondary mode—12 semester hours.	Number of cases.
A. B. (State).....	5	6	33
A. B. (endowed).....	15	7	38
B. S. (State).....	2	2	17
B. S. (endowed).....	4	2	19
B. Ed. (State).....	3	4	17
B. Ed. (endowed).....	3	0	6
Ph. B. (State).....	0	0	0
Ph. B. (endowed).....	0	1	6
Litt. B. (State).....	0	0	1
Litt. B. (endowed).....	0	0	1
Total.....	32	22	138

In 32 out of 138 cases (23.19 per cent) the primary mode for science is 6 semester hours, in 22 out of 138 cases (16.66 per cent) the secondary mode is 12 semester hours.

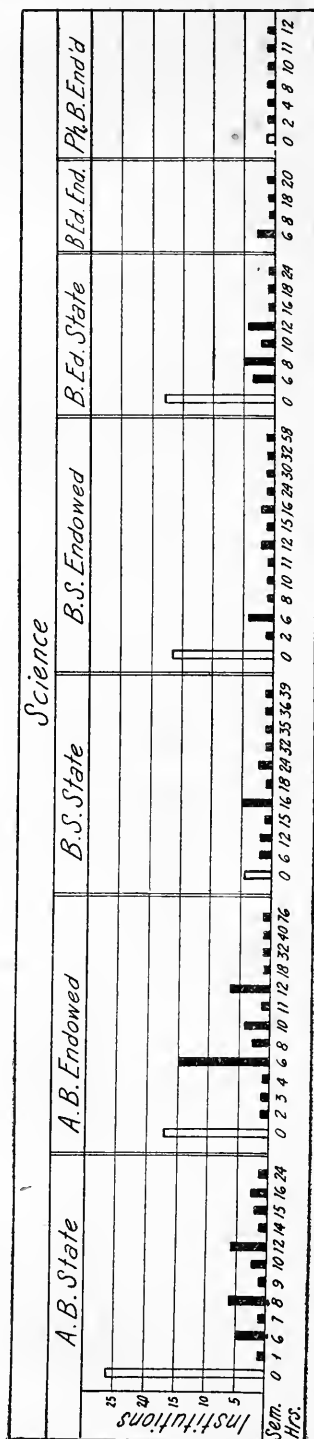
*Summary of frequencies—science.*

A. B. (STATE).

1 requires 1 semester hour—0.83 per cent.  
 5 require 6 semester hours—4.35 to 5 per cent.  
 1 requires 7 semester hours—5.47 per cent.  
 6 require 8 semester hours—6.06 to 6.66 per cent.  
 1 requires 9 semester hours—7.68 per cent.  
 2 require 10 semester hours—8.19 to 8.33 per cent.  
 6 require 12 semester hours—10 to 10.25 per cent.  
 1 requires 14 semester hours—11.66 per cent.  
 2 require 15 semester hours—10 to 12.50 per cent.  
 3 require 16 semester hours—13.11 to 13.33 per cent.  
 1 requires 24 semester hours—20 per cent.

A. B. (ENDOWED).

1 requires 2 semester hours—1.61 per cent.  
 1 requires 3 semester hours—2.50 per cent.  
 1 requires 4 semester hours—2.90 per cent.  
 15 require 6 semester hours—4.41 to 5.45 per cent.  
 3 require 8 semester hours—5.71 to 6.66 per cent.  
 4 require 10 semester hours—6.11 to 8.33 per cent.  
 1 requires 11 semester hours—8.45 per cent.  
 7 require 12 semester hours—7.89 to 10.42 per cent.  
 1 requires 18 semester hours—15 per cent.  
 1 requires 32 semester hours—19.04 per cent.  
 1 requires 40 semester hours—33.3 per cent.  
 1 requires 76 semester hours—44.15 per cent.



GRAPH 12.

*Summary of frequencies—science—Continued.*

## B. S. (STATE).

- 2 require 6 semester hours—4.35 to 5 per cent.
- 2 require 12 semester hours—9.37 per cent.
- 1 requires 15 semester hours—10 per cent.
- 5 require 16 semester hours—12.12 to 13.33 per cent.
- 1 requires 18 semester hours—13.84 per cent.
- 2 require 24 semester hours—18.16 to 20 per cent.
- 1 requires 32 semester hours—26.6 per cent.
- 1 requires 35 semester hours—29.15 per cent.
- 1 requires 36 semester hours—20 per cent.
- 1 requires 39 semester hours—30.40 per cent.

## B. ED., ETC. (STATE).

- 3 require 6 semester hours—4.76 to 5 per cent.
- 5 require 8 semester hours—6.24 to 6.66 per cent.
- 2 require 10 semester hours—7.57 to 8.33 per cent.
- 4 require 12 semester hours—8.69 to 10 per cent.
- 1 requires 16 semester hours—13.11 per cent.
- 1 requires 18 semester hours—13.23 per cent.
- 1 requires 24 semester hours—18.46 per cent.

## PH. B. (STATE).

None.

## LITT. B. (STATE).

- 1 requires 8 semester hours—6.06 per cent.

## B. S. (ENDOWED).

- 1 requires 2 semester hours—1.61 per cent.
- 4 require 6 semester hours—5 per cent.
- 1 requires 8 semester hours—6.66 per cent.
- 1 requires 10 semester hours—7.93 per cent.
- 1 requires 11 semester hours—8.20 per cent.
- 2 require 12 semester hours—9.37 to 10 per cent.
- 1 requires 15 semester hours—11.02 per cent.
- 2 require 16 semester hours—11.60 to 16.66 per cent.
- 1 requires 24 semester hours—16.66 per cent.
- 1 requires 30 semester hours—21.13 per cent.
- 1 requires 32 semester hours—18.49 per cent.
- 1 requires 58 semester hours—41.42 per cent.

## B. ED., ETC. (ENDOWED).

- 3 require 6 semester hours—4.68 to 5 per cent.
- 1 requires 8 semester hours—6.66 per cent.
- 1 requires 18 semester hours—14.05 per cent.
- 1 requires 20 semester hours—15.20 per cent.

## PH. B. (ENDOWED).

- 1 requires 2 semester hours—1.61 per cent.
- 1 requires 4 semester hours—2.80 per cent.
- 1 requires 8 semester hours—5.71 per cent.
- 1 requires 10 semester hours—6.58 per cent.
- 1 requires 11 semester hours—8.45 per cent.
- 1 requires 12 semester hours—10 per cent.

## LITT. B. (ENDOWED).

- 1 requires 10 semester hours—7.93 per cent.

TABLE 31.—*College requirements in social science for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in social science.	Per cent required in social science.
1	University of Kentucky.....	128	4	3.12
2	University of Oklahoma.....	122	4	3.28
3	State College of Washington.....	150	5	3.33
4	University of Missouri.....	122	5	4.10
5	University of Colorado.....	120	6	5.00
6	University of Florida.....	120	6	5.00
7	Howard University (D. C.).....	120	6	5.00
8	University of North Carolina.....	120	6	5.00
9	University of Texas.....	120	6	5.00
10	University of California.....	117	6	5.12
11	University of Mississippi.....	130	8	6.15
12	West Virginia University.....	124	8	6.45
13	University of Illinois.....	123	8	6.50
14	University of South Carolina.....	138	12	8.69
15	University of Georgia.....	130	12	9.23
16	Delaware College.....	128	12	9.37
17	University of Alabama.....	120	12	10
18	Ohio State University.....	120	12	10
19	Ohio University.....	120	12	10
20	Miami University.....	120	12	10
21	University of Virginia.....	120	12	10
22	University of Washington.....	120	14	11.66
23	Pennsylvania State College.....	132	15	11.35
24	Rutgers College (N. J.).....	132	16	12.12
25	University of Idaho.....	120	18	15
26	Louisiana State University.....	136	24	17.64
27	University of New Mexico.....	120	24	20

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Lafayette College.....	130	3	2.31
2	Union University.....	138	4	2.90
3	Catholic University of America.....	168	6	3.57
4	Tulane University.....	128	6	4.68
5	Vanderbilt University.....	128	6	4.68
6	Randolph-Macon College.....	128	6	4.69
7	Johns Hopkins University.....	125	6	4.80
8	Colorado College.....	120	6	5
9	Columbia University.....	120	6	5
10	George Washington University (group 3).....	120	6	5
11	Goucher College.....	120	6	5
12	Grinnell College.....	120	6	5
13	New York University.....	120	6	5
14	Smith College.....	120	6	5
15	Oberlin College.....	118	6	5.08
16	Wells College.....	115	6	5.22
17	Vassar College.....	111	6	5.45
18	Haverford College.....	128	9	7.03
19	University of the South.....	136	12	8.82
20	Brown University.....	120	12	10
21	Muhlenberg College.....	140	14	10
22	Catholic University of America (medical group, school of sciences).....	172	18	10.45
23	Catholic University of America (school of letters, classical and modern language groups).....	152	18	11.84
24	George Washington University (group 2).....	120	18	15
25	Catholic University of America (Latin—Historical group, school of letters).....	152	24	15.79
26	George Washington University (group 4).....	120	30	25
27	Catholic University of America (school of philosophy).....	154	32	21
28	Catholic University of America (economics group).....	166	56	33.60

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Kentucky.....	128	4	3.12
2	State College of Washington.....	150	5	3.33
3	University of Mississippi.....	130	8	6.15
4	University of Illinois.....	123	8	6.50
5	College of William and Mary.....	120	8	6.66
6	University of South Carolina.....	138	12	8.69
7	Delaware College.....	128	12	9.37
8	University of Idaho.....	120	12	10
9	University of Virginia.....	120	12	10
10	Rutgers College (N. J.).....	136	16	12.12

TABLE 31.—*College requirements in social science for the bachelor's degree—Continued.*

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in social science.	Per cent required in social science.
1	Muhlenburg College.....	140	4	2.85
2	Tulane University.....	142	6	4.22
3	University of the South.....	136	6	4.41
4	Vanderbilt University.....	128	6	4.68
5	Randolph-Macon College.....	128	6	4.68
6	Columbia University.....	120	6	5.00
7	Grinnell College.....	120	6	5.00
8	New York University.....	120	6	5.00
9	Union University.....	138	8	5.80
10	Haverford College.....	128	9	7.03

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Mississippi.....	130	4	3.01
2	University of Oklahoma.....	128	4	3.12
3	University of Missouri.....	120	5	4.16
4	University of Texas.....	126	6	4.76
5	University of Washington.....	124	6	4.83
6	University of Wyoming.....	123	6	4.87
7	University of Colorado.....	120	6	5.00
8	University of North Carolina.....	120	6	5.00
9	University of Idaho.....	120	8	6.66
10	University of Oregon.....	120	9	7.50
11	University of South Carolina.....	138	12	8.68
12	University of Georgia.....	132	12	9.08
13	University of New Mexico.....	128	12	9.38
14	Ohio State University.....	120	12	12.10
15	Louisiana State University.....	136	24	17.64
16	Miami University.....	120	26	21.66

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Johns Hopkins University and Goucher College.....	120	4	3.33
2	Tulane University.....	132	6	4.54
3	Columbia University.....	120	6	5
4	University of Pittsburgh.....	128	10	7.87
5	George Washington University.....	124	12	9.67

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.) (for Litt. B.).....	132	16	12.12
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## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Lafayette College (for Ph. B.).....	130	3	2.31
2	Union University (for Ph. B.).....	138	8	5.80
3	Brown University (for Ph. B.).....	120	12	10
4	Muhlenberg College (for Ph. B.).....	140	22	15.71
5	Catholic University of America (for Ph. B.).....	152	24	15.78

## SOCIAL SCIENCE.

(Including history, economics, and political science.)

Social science is required for the A. B. degree by 27 of the 49 State schools and 20 of the 50 endowed institutions, according to Table 31. It is also prescribed for the B. S. degree by 10 of the 23 State schools and 10 of the 27 endowed institutions. Sixteen of the 30 State and 5 of the 6 endowed institutions prescribe it for the B. Ed. degree. Social science is not required for the Ph. B. at the University of Vermont, nor by the University of Chicago or Hamilton College. Rutgers prescribes social science for the Litt. B. degree, but Princeton does not.

TABLE 32.—*Social science.*

[Semester hours.]

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Me- dian.	Per cent.	Mode.	Per cent.
A. B. (State).....	4	24	10.55	8.44	8	6.45	12	8.6 to 10
A. B. (endowed).....	1	56	12.14	8.86	6	5.00	6	3.5 to 5.4
B. S. (State).....	4	16	9.70	7.59	8-12	7.07	12	8.6 to 10
B. S. (endowed).....	4	9	6.30	4.88	6	4.64	6	4.2 to 5
B. Ed. (State).....	4	26	9.87	7.96	6-8	5.83	6	4.7 to 5
B. Ed. (endowed).....	4	12	7.60	6.06	6	4.54	6	4.5 to 5
Ph. B. (State).....								
Ph. B. (endowed).....	3	24	14.25	9.90	12	10.00	None.	None.
Litt. B. (State).....	(16)	(16)	(16.00)	(12.12)	16	(12.12)	(16)	(12.12)
Litt. B. (endowed).....								
General average.....			10.40	8.04				

Table 32 shows that social science is not required for the B. S. degree to the extent that it is for the A. B. degree. The requirements for the B. Ed. degree are less than for the A. B. degree. With the exception of the A. B. degree, the endowed schools require considerably less social science than the State schools.

The high average for the A. B. degree of endowed schools is largely due to the excessive requirements of a few institutions, otherwise there would be more harmony between the average and the median and mode.

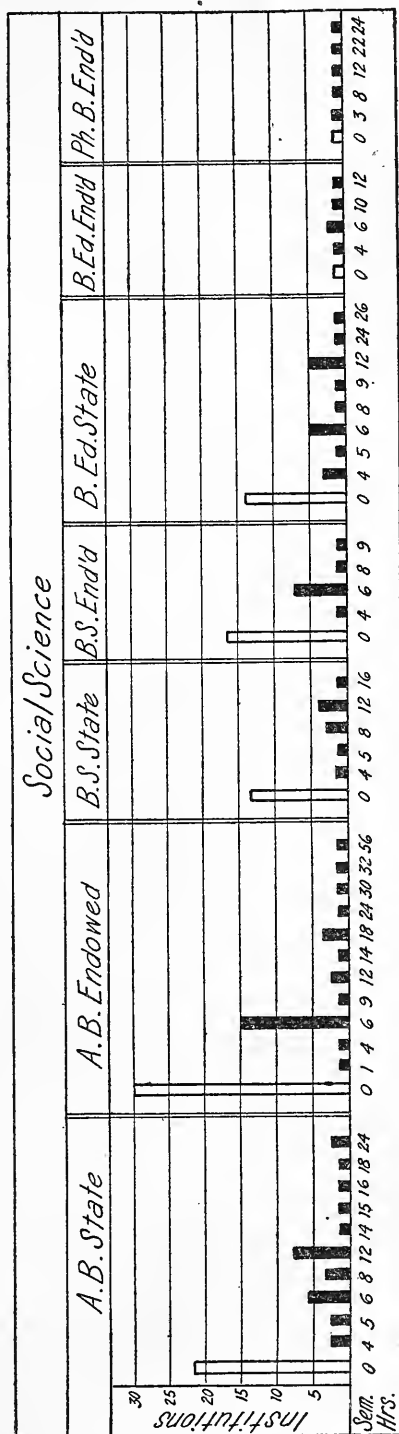
The average requirements in social science for the Ph. B. degree of the endowed schools are considerably above the general average for this subject.

Graph 13 and the Frequency-Distribution Summary show that the modes for the A. B. and B. S. degrees of endowed schools are much larger and characteristic than those of the State schools.

While the mode for the B. Ed. degree of State schools is 6 semester hours yet it lacks weight due to the importance of the number of frequencies of the 12 semester hours requirement.

The mode has little significance for the B. Ed. of endowed schools. A mode does not exist for the Litt. B. degree or the Ph. B. degree.





GRAPH 13.

*Summary of the mode.*

## SOCIAL SCIENCE.

Degree.	Primary mode— 6 semester hours.	Secondary mode— 12 semester hours.	Number of cases.
A. B. (State).....	6	8	27
A. B. (endowed).....	15	2	28
B. S. (State).....	0	3	10
B. S. (endowed).....	7	4	10
B. Ed. (State).....	5	1	16
B. Ed. (endowed).....	2	0	5
Ph. B. (State).....	0	0	0
Ph. B. (endowed).....	0	1	5
Litt. B. (State).....	0	0	1
Litt. B. (endowed).....	0	0	0
Total.....	35	19	102

In 35 out of 102 cases (34.5 per cent) the primary mode for social science is 6 semester hours; in 19 out of 102 cases (18.6 per cent) the secondary mode is 12 semester hours.

Social science, in general, exhibits the same characteristics regarding standards as does science.

*Summary of frequencies—social science.*

## A. B. (STATE).

22 require 0 semester hours.  
 2 require 4 semester hours—3.12 to 3.28 per cent.  
 2 require 5 semester hours—3.33 to 4.10 per cent.  
 6 require 6 semester hours—5 to 5.12 per cent.  
 3 require 8 semester hours—6.15 to 6.50 per cent.  
 8 require 12 semester hours—8.69 to 10 per cent.  
 1 requires 14 semester hours—11.66 per cent.  
 1 requires 15 semester hours—11.35 per cent.  
 1 requires 16 semester hours—12.12 per cent.  
 1 requires 18 semester hours—15 per cent.  
 2 require 24 semester hours—17.64 to 20 per cent.

## B. S. (STATE).

13 require 0 semester hours.  
 1 requires 4 semester hours—2.85 per cent.  
 1 requires 5 semester hours—3.33 per cent.  
 3 require 8 semester hours—6.15 to 6.66 per cent.  
 4 require 12 semester hours—8.69 to 10 per cent.  
 1 requires 16 semester hours—12.12 per cent.

## A. B. (ENDOWED).

30 require 0 semester hours.  
 1 requires 1 semester hour—2.31 per cent.  
 1 requires 4 semester hours—2.90 per cent.  
 15 require 6 semester hours—3.57 to 5.45 per cent.  
 1 requires 9 semester hours—7.03 per cent.  
 2 require 12 semester hours—8.82 to 10 per cent.  
 1 requires 14 semester hours—10 per cent.  
 3 require 18 semester hours—10.45 to 15 per cent.  
 1 requires 24 semester hours—15.79 per cent.  
 1 requires 30 semester hours—25 per cent.  
 1 requires 32 semester hours—20 per cent.  
 1 requires 56 semester hours—34.21 per cent.

## B. S. (ENDOWED).

17 require 0 semester hours.  
 1 requires 4 semester hours—2.85 per cent.  
 7 require 6 semester hours—4.22 to 5 per cent.  
 1 requires 8 semester hours—5.80 per cent.  
 1 requires 9 semester hours—7.03 per cent.

*Summary of frequencies—social science—Continued.*

B. ED., ETC. (STATE).	B. ED., ETC. (ENDOWED).
14 require 0 semester hours.	1 requires 0 semester hours.
2 require 4 semester hours—3.01 to 3.12 per cent.	1 requires 4 semester hours—3.33 per cent.
1 requires 5 semester hours—4.16 per cent.	2 require 6 semester hours—4.54 to 5 per cent.
5 require 6 semester hours—4.76 to 5 per cent.	1 requires 10 semester hours—7.81 per cent.
1 requires 8 semester hours—6.66 per cent.	1 requires 12 semester hours—9.67 per cent.
1 requires 9 semester hours—7.50 per cent.	
4 require 12 semester hours—8.69 to 12.16 per cent.	
1 requires 24 semester hours—17.64 per cent.	
1 requires 26 semester hours—21.66 per cent.	
PH. B. (STATE).	PH. B. (ENDOWED).
None.	2 require 0 semester hours.
	1 requires 3 semester hours—2.31 per cent.
	1 requires 8 semester hours—5.80 per cent.
	1 requires 22 semester hours—15.71 per cent.
	1 requires 24 semester hours—15.78 per cent.
	1 requires 12 semester hours—10 per cent.
LITT. B. (STATE).	LITT. B. (ENDOWED).
1 requires 16 semester hours—12.12 per cent.	None.

TABLE 33.—*College requirements in philosophy and psychology for the bachelor's degree.*

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in philosophy and psychology.	Per cent required in philosophy and psychology.
1	University of Mississippi.....	130	4	3.07
2	Rutgers College (N. J.).....	132	6	4.54
3	Pennsylvania State College.....	132	6	4.54
4	University of Kentucky.....	128	6	4.68
5	University of Illinois.....	123	6	4.87
6	Miami University.....	120	6	5.00
7	University of Washington.....	120	8	6.66
8	College of William and Mary.....	120	9	7.50
9	University of Virginia.....	120	12	10

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in philosophy and psychology.	Per cent required in philosophy and psychology.
1	Hamilton College.....	124	2	1.61
2	Carleton College.....	120	3	2.50
3	Oberlin College.....	118	3	2.54
4	Vassar College.....	111	3	2.72
5	Catholic University of America (medical group, school of sciences)...	172	6	3.48
6	Catholic University of America (school of sciences).....	168	6	3.57
7	Muhlenberg College.....	140	6	4.28

TABLE 33.—*College requirements in philosophy and psychology for the bachelor's degree—Continued.*

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Hours required in philosophy and psychology.	Per cent required in philosophy and psychology.
8	Haverford College.....	128	6	4.68
9	Vanderbilt University.....	128	6	4.68
10	Randolph-Macon College.....	128	6	4.68
11	Princeton University.....	126	6	4.76
12	Johns Hopkins University.....	125	6	4.80
13	Columbia University.....	120	6	5
14	George Washington University.....	120	6	5
15	Goucher College.....	120	6	5
16	Grinnell College.....	120	6	5
17	New York University.....	120	6	5
18	Smith College.....	120	6	5
19	Wellesley College.....	118	6	5.08
20	Wells College.....	115	6	5.21
21	Bryn Mawr College.....	120	10	8.32
22	University of the South.....	136	12	8.82
23	Catholic University of America (school of philosophy, economics group).....	162	18	10.98
24	Catholic University of America (school of letters).....	152	18	11.84
25	Catholic University of America (school of philosophy).....	154	24	15.73

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Mississippi.....	130	4	3.07
2	University of Kentucky.....	128	6	4.68
3	College of William and Mary.....	120	6	5
4	Rutgers College (N. J.).....	132	12	9.08
5	University of Virginia.....	120	12	10

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College.....	124	2	1.61
2	Carleton College.....	120	3	2.50
3	Catholic University of America (school of sciences).....	173	6	3.46
4	Muhlenberg College.....	140	6	4.28
5	Haverford College.....	128	6	4.68
6	Vanderbilt University.....	128	6	4.68
7	Randolph-Macon College.....	128	6	4.68
8	Princeton University.....	126	6	4.76
9	Columbia University.....	120	6	5
10	Grinnell College.....	120	6	5
11	New York University.....	120	6	5
12	University of the South.....	136	12	8.82

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of South Carolina.....	138	3	2.17
2	University of Oregon.....	120	3	2.50
3	University of Utah (for A. B.).....	120	3	2.50
4	University of Oklahoma.....	128	4	3.12
5	University of Washington.....	124	4	3.22
6	University of Georgia.....	132	6	4.54
7	University of Vermont.....	126	6	4.76
8	University of Nebraska.....	121	6	4.96
9	University of Florida.....	120	6	5
10	State University of Iowa.....	120	6	5
11	University of Minnesota.....	120	6	5
12	Ohio State University.....	120	6	5
13	University of New Mexico.....	128	9	7.01
14	University of Tennessee.....	120	9	7.50
15	University of Mississippi.....	130	10	7.69

TABLE 33.—*College requirements in philosophy and psychology for the bachelor's degree—Continued.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in philosophy and psychology.	Percent required in philosophy and psychology.
1	University of Pittsburgh.....	128	4	3.12
2	George Washington University.....	124	12	9.66

FOR PH. B. AND LITT. B. DEGREES FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutgers College (N. J.) (for Litt. B.).....	132	12	9.08
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FOR PH. B. AND LITT. B. DEGREES FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College (for Ph. B.).....	124	2	1.61
2	Muhlenberg College (for Ph. B.).....	140	6	4.28
3	Brown University (for Ph. B.).....	120	6	5
4	Catholic University of America (for Ph. B.).....	152	37	24.37
5	Princeton University (for Litt. B.).....	126	6	4.76

## PHILOSOPHY AND PSYCHOLOGY.

Philosophy and psychology are required for the A. B. degree by 9 State schools and 21 endowed institutions according to Table 33.

Five State and 12 endowed institutions prescribe these subjects for the B. S. degree: 15 State and 2 endowed schools for the educational degree; 4 endowed schools for the Ph. B. degree; and in each school for the Litt. B. degree.

Philosophy and psychology are not required for the Ph. B. degree at the University of Vermont.

TABLE 34.—*Philosophy and psychology.*

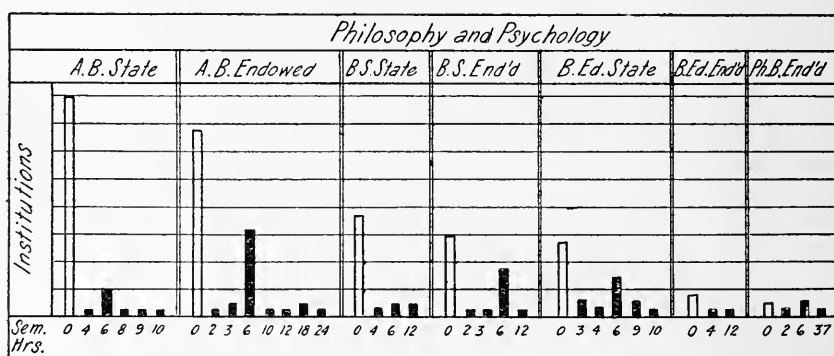
(Semester hours.)

Degree.	Minimum.	Maximum.	Average.	Per cent.	Median.	Per cent.	Mode.	Per cent.
A. B. (State).....	4	10	7.00	5.65	6	5.00	6	4.5 to 5
A. B. (endowed).....	2	24	7.56	7.41	6	4.80	6	3.5 to 5.2
B. S. (State).....	4	12	8.00	6.36	6	5.00	6 or 12	4.6 to 10
B. S. (endowed).....	1	12	5.92	4.56	6	4.68	6	3.4 to 5
B. Ed. (State).....	3	10	5.80	4.66	6	4.96	6	4.5 to 5
B. Ed. (endowed).....	4	12	8.00	6.39	4-12	3.12 to 9.6	None.	None.
Ph. B. (State).....								
Ph. B. (endowed).....	2	37	15.00	10.08	6	4.69	None.	None.
Litt. B. (State).....	(12)	(12)	(12.00)	(9.08)	(12)	(9.08)	(12)	(9.08)
Litt. B. (endowed).....	(6)	(6)	(6.00)	(4.76)	(6)	(4.76)	(6)	(4.76)
General average.....			7.23	6.13				

Table 34\* shows that philosophy and psychology have a more nearly uniform average throughout for the different degrees than many other subjects. The requirements of the endowed schools exceed those of the State schools in philosophy and psychology, for the A. B. degree and the B. Ed. degree. For the B. S. degree, the State institutions average a little more than the endowed schools. For the Ph. B. degree the requirements are double that of the general average requirement.

The mode is characteristic for each degree except in the case of the B. S. degree and B. Ed. of the State schools which show important frequencies almost equivalent to the mode. (See Graph 14.)

On the whole, the prevailing standard in these subjects is 6 semester hours, the exceptions being relatively few.



GRAPH 14.

*Summary of the mode.*

#### PHILOSOPHY AND PSYCHOLOGY.

Degree.	Primary mode—6 semester hours.	Number of cases.
A. B. (State).....	5	9
A. B. (endowed).....	16	25
B. S. (State).....	2	5
B. S. (endowed).....	10	12
B. Ed. (State).....	7	15
B. Ed. (endowed).....	0	2
Ph. B. (State).....	0	0
Ph. B. (endowed).....	1	4
Litt. B. (State).....	0	1
Litt. B. (endowed).....	1	1
Total.....	42	74

In 42 out of 74 cases (56.7 per cent) the mode for philosophy and psychology is 6 semester hours.

*Summary of frequencies—philosophy and psychology.<sup>1</sup>*

## A. B. (STATE).

- 1 requires 4 semester hours—3.07 per cent.
- 5 requires 6 semester hours—4.54 to 5 per cent.
- 1 requires 8 semester hours—6.66 per cent.
- 1 requires 9 semester hours—7.50 per cent.
- 1 requires 12 semester hours—10 per cent.

## B. S. (STATE).

- 1 requires 4 semester hours—3.07 per cent.
- 2 require 6 semester hours—4.68 to 5 per cent.
- 2 require 12 semester hours—9.08 to 10 per cent.

## B. ED., ETC. (STATE).

- 3 require 3 semester hours—2.17 to 2.50 per cent.
- 2 require 4 semester hours—3.12 to 3.22 per cent.
- 7 require 6 semester hours—4.54 to 5 per cent.
- 2 require 9 semester hours—7.01 to 7.50 per cent.
- 1 requires 10 semester hours—7.69 per cent.

## PH. B. (STATE).

None.

## LITT. B. (STATE).

- 1 requires 12 semester hours—9.08 per cent.

## A. B. (ENDOWED).

- 1 requires 2 semester hours—1.61 per cent.
- 3 require 3 semester hours—2.50 to 2.52 per cent.
- 16 require 6 semester hours—3.48 to 5.21 per cent.
- 1 requires 10 semester hours—8.32 per cent.
- 1 requires 12 semester hours—8.82 per cent.
- 2 require 18 semester hours—10.98 to 11.84 per cent.
- 1 requires 24 semester hours—15.73 per cent.

## B. S. (ENDOWED).

- 1 requires 2 semester hours—1.61 per cent.
- 1 requires 3 semester hours—2.50 per cent.
- 9 require 6 semester hours—3.46 to 5 per cent.
- 1 requires 12 semester hours—8.82 per cent.

## B. ED., ETC. (ENDOWED).

- 1 requires 4 semester hours—3.12 per cent.
- 1 requires 12 semester hours—9.66 per cent.

## PH. B. (ENDOWED).

- 1 requires 2 semester hours—1.61 per cent.
- 2 require 6 semester hours—4.28 per cent.
- 1 requires 37 semester hours—24.37 per cent.

## LITT. B. (ENDOWED).

- 1 requires 6 semester hours—4.76 per cent.

<sup>1</sup> Negative instances not enumerated.

TABLE 35—*College requirements in Bible or religion for the bachelor's degree.*

## FOR A. E. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required.	Per cent required.
1	Rutgers College (New Jersey).....	132	2	1.51

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Beloit College.....	120	2	1.61
2	Western Reserve University.....	122	2	1.64
3	Haverford College.....	123	3	2.34
4	Swarthmore College.....	124	3	2.42
5	University of the South.....	136	4	2.94
6	Goucher College.....	120	4	3.33
7	Oberlin College.....	118	4	3.33
8	Wells College.....	115	4	3.47
9	Randolph-Macon College.....	128	6	4.69
10	Hamilton College.....	124	6	4.84
11	Smith College.....	120	6	5.00
12	Wellesley College.....	118	6	5.03
13	Catholic University of America (medical group, school of sciences).....	172	8	4.64
14	Catholic University of America (school of sciences).....	168	8	4.76
15	Catholic University of America (economics group, school of philosophy).....	166	8	4.80
16	Catholic University of America (school of philosophy).....	154	8	5.24
17	Catholic University of America (school of letters).....	152	8	5.26
18	Lafayette College.....	130	8	6.15
19	Trinity College (Group A).....	128	8	6.25
20	Muhlenberg College.....	140	14	10

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Haverford College.....	128	3	2.34
2	University of the South.....	136	4	2.94
3	Randolph-Macon College.....	128	6	4.69
4	Hamilton College.....	124	6	4.84
5	Catholic University of America (school of science).....	173	8	4.62
6	Lafayette College.....	134	8	5.97
7	Muhlenberg College.....	140	14	10

## FOR PH. B. AND LITT. B. DEGREES FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutgers College (New Jersey) (for Litt. B.).....	132	2	1.51
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## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College (for Ph. B.).....	124	6	4.84
2	Catholic University of America (for Ph. B.).....	152	8	5.26
3	Lafayette College (for Ph. B.).....	130	8	6.15
4	Muhlenberg College (for Ph. B.).....	140	14	10

BIBLE OR RELIGION.<sup>1</sup>

According to Table 35, Bible is a prescribed subject for the A. B. degree at Rutgers College, and at the following 16 endowed schools: Beloit, Western Reserve, Haverford,<sup>1</sup> Swarthmore, University of the

<sup>1</sup> These colleges belong to the list of denominational colleges; the others are listed among the nonsectarian schools. Reprint from the Report of the Commissioner of Education, Chap. III, Vol. II, 1916.

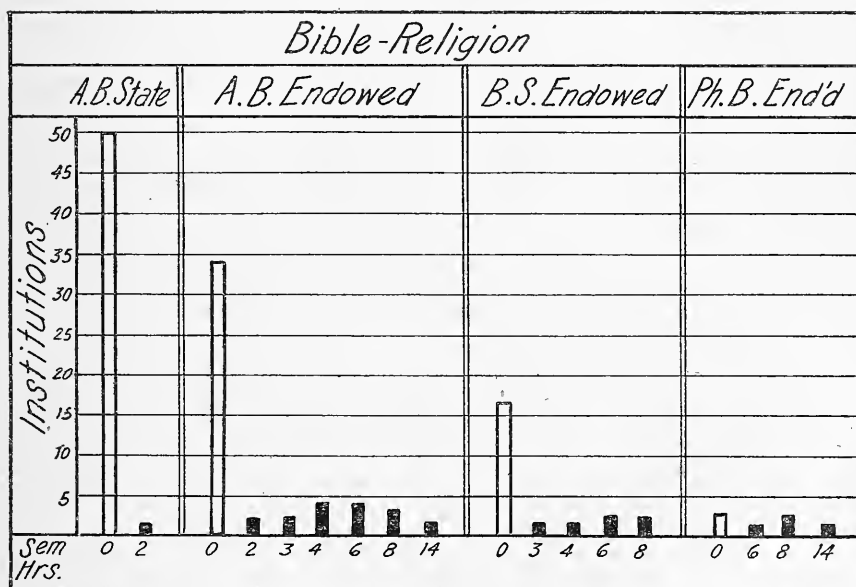


South,<sup>1</sup> Goucher, Oberlin, Wells, Randolph-Macon,<sup>1</sup> Smith, Wellesley, Hamilton, Lafayette,<sup>1</sup> Trinity<sup>1</sup> (group A), and Muhlenberg.<sup>1</sup> The Catholic University<sup>1</sup> also requires a course in religion for all its candidates for the degree of A. B. For the B. S. degree the following schools prescribe Bible or religion: Haverford, University of the South, Randolph-Macon, Hamilton, Catholic University, Lafayette, and Muhlenberg.

Bible is required for the Litt. B. degree at Rutgers and for the Ph. B. at Hamilton, Catholic University, Lafayette, and Muhlenberg.

On the whole the requirements for Bible are rather low, fully half of the schools requiring less than one year's work. The lowest prescription is 2 semester hours which is given by Rutgers, Beloit, and Western Reserve. Haverford and Swarthmore require 3 semester hours while the University of the South, Goucher, Oberlin, and Wells prescribe 4 semester hours. The maximum requirement is made by Muhlenberg with 14 semester hours or 10 per cent of the entire college course. (See Graph 15.)

The requirements with respect to the other degrees closely resemble those for the A. B. degree.



GRAPH 15.

<sup>1</sup> These colleges belong to the list of denominational colleges; the others are listed among the nonsectarian schools. Reprint from the Report of the Commissioner of Education, Chap. III, Vol. II, 1916.

*Summary of frequencies—Bible—Religion.*<sup>1</sup>

A. B. (STATE).		A. B. (ENDOWED).	
1 requires 2 semester hours—1.51 per cent.		2 require 2 semester hours—1.61 to 1.64 per cent.	
		2 require 3 semester hours—2.34 to 2.42 per cent.	
		4 require 4 semester hours—2.94 to 3.47 per cent.	
		4 require 6 semester hours—4.69 to 5.08 per cent.	
		3 require 8 semester hours—4.64 to 6.26 per cent.	
		1 requires 14 semester hours—10 per cent.	
B. S. (STATE).		B. S. (ENDOWED).	
None.		1 requires 3 semester hours—2.34 per cent.	
		1 requires 4 semester hours—2.94 per cent.	
		2 require 6 semester hours—4.69 to 4.84 per cent.	
		2 require 8 semester hours—4.62 to 5.97 per cent.	
PH. B. (STATE).		PH. B. (ENDOWED).	
None.		1 requires 6 semester hours—4.84 per cent.	
		2 require 8 semester hours.—5.26 to 6.15 per cent.	
		1 requires 14 semester hours.—10 per cent.	
LITT. B. (STATE).		LITT. B. (ENDOWED).	
1 requires 2 semester hours—1.51 per cent.		None.	

TABLE 36.—*College requirements in education for the bachelor's degree.*

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in education.	Per cent required in education.
1	Pennsylvania State College.....	132	3	2.27

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University.....	152	6	3.98
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<sup>1</sup> Negative instances not enumerated.

TABLE 36.—*College requirements in education for the bachelor's degree*—Continued.

FOR BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in education.	Per cent required in education.
1	University of Idaho.....	120	7	5.83
2	University of Michigan.....	120	11	9.16
3	State University of Iowa.....	120	14	11.66
4	University of Nebraska.....	121	15	20.40
5	University of Minnesota.....	120	15	12.50
6	University of Mississippi.....	130	16	12.30
7	University of Oregon.....	120	17	14.16
8	University of Nevada.....	120	18	15
9	University of Tennessee.....	120	18	15
10	University of Vermont.....	126	19	15.08
11	University of Oklahoma.....	128	20	15.62
12	University of North Dakota.....	122	20	16.40
13	Ohio State University.....	120	22	18.33
14	University of Utah.....	120	20	18.33
15	Louisiana State University.....	136	24	17.64
16	University of Georgia.....	132	24	18.17
17	University of Kansas.....	132	24	18.17
18	University of Texas.....	126	24	19.04
19	University of Washington.....	124	24	19.34
20	University of Colorado.....	120	24	20
21	University of Missouri.....	120	24	20
22	University of Wyoming.....	123	26	21.13
23	University of South Carolina.....	138	30	21.73
24	Howard University (D. C.).....	126	30	23.28
25	University of Alabama.....	120	30	25
26	University of Arkansas.....	126	32	25.50
27	Miami University.....	120	34	28.33
28	University of Florida.....	120	36	30
29	University of North Carolina.....	120	40	33.33

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	George Washington University.....	124	20	16.12
2	University of Chicago.....	120	23½	19.50
3	Johns Hopkins and Goucher College.....	120	24	20
4	Tulane University.....	132	28	29.19
5	University of Pittsburgh.....	128	38	29.67
6	Columbia University.....	120	45	37.50

FOR PH. B. DEGREE FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America.....	154	6	3.94
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## EDUCATION.

According to Table 36, education is a prescribed college subject for the A. B. degree at the Pennsylvania State College and the Catholic University (school of philosophy). The latter institution requires education for the Ph. B. degree also.

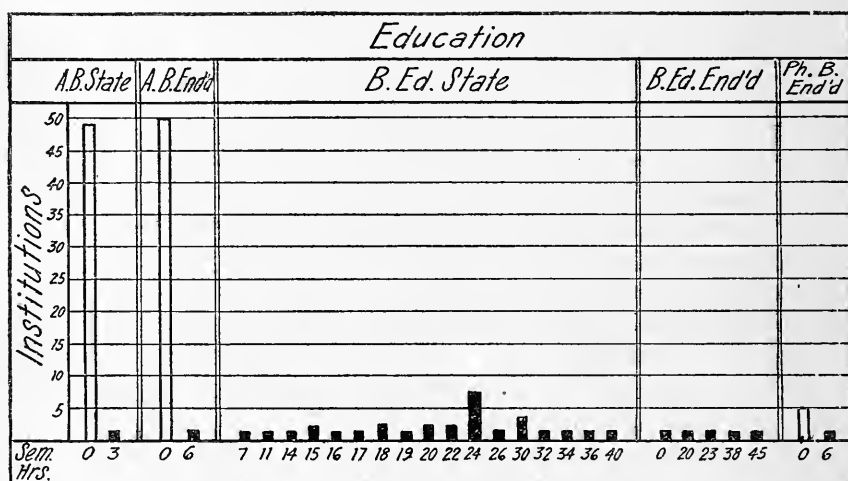
For the bachelor's degree in education all of the 30 State schools and 5 of the 6 endowed schools include education in the list of prescribed studies. Johns Hopkins University and Goucher College do not list education among the prescribed subjects, but include it under the free electives as follows: "But at least a minimum of 24 points (semester hours) must be completed in the college course for teachers."

TABLE 37.—*Education.*

[Semester hours.]

Degree.	Mini- mum.	Maxi- mum.	Average.	Per cent.	Median	Per cent.	Mode.	Per cent.
A. B. (State).....	(3)	(3)	(3.00)	(2.27)	(3)	(2.27)	(3)	(2.27)
A. B. (endowed).....	(6)	(6)	(6.00)	(3.98)	(6)	(3.98)	(6)	(3.98)
B. Ed. (State).....	7	40	22.75	17.74	24	17.61	24	17.6 to 20
B. Ed. (endowed).....	20	45	31.50	25.69	23 to 38	24.56	None.	None.
Ph. B. (endowed).....	(6)	(6)	(6.00)	(3.45)	(6)	(3.45)	(6)	(3.45)
General average.....			22.25	17.43				

It is evident from Table 37 that the State schools require an amount slightly in excess of the general averages and the endowed institutions prescribe nearly 9 per cent more, on the average, than the State schools. The general average for education is the highest of any of the prescribed subjects. (See Graph 16.)



GRAPH 16.

TABLE 38.—*College requirements in miscellaneous subjects for the bachelor's degree.*

## HYGIENE.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in hygiene.	Per cent required in hygiene.
1	University of California (Plan A).....	117	2	1.71

TABLE 38.—*College requirements in miscellaneous subjects for the bachelor's degree—Con.*

## HYGIENE—Continued.

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in hygiene.	Per cent required in hygiene.
1	Syracuse University.....	120	1	0.82
2	Wells College.....	115	1	.87
3	Wesleyan University.....	120	2	1.66
4	Smith College.....	120	4	3.33
5	Wellesley College.....	118	4	3.38
6	Washington and Lee University.....	126	6	4.76

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Syracuse University.....	120	1	0.83
2	Wesleyan University.....	120	2	1.66

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES.

1	Columbia University.....	120	2	1.66
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## PUBLIC SPEAKING, ETC.

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	126	4	3.17
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## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Johns Hopkins University.....	125	1	0.80
2	Wells College.....	115	1	.87
3	Syracuse University.....	120	2	1.66
4	Wesleyan University.....	120	2	1.66

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	132	4	3.03
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## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Wesleyan University.....	120	2	1.66
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	126	4	3.17
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	128	4	3.12
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## FOR PH. B. FROM STATE UNIVERSITIES.

1	University of Vermont.....	125	4	3.17
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TABLE 38.—*College requirements in miscellaneous subjects for the bachelor's degree—Con.*

## ART.

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in hygiene.	Per cent required in hygiene.
1	Pennsylvania State College.....	132	1	0.76
2	Rutgers College (N. J.).....	132	2	1.57

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Oberlin College.....	118	2	1.69
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## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutgers College (N. J.).....	135	2	1.51
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## FOR LITT. B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.).....	132	2	1.51
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## MATRICULATION LECTURES AND PROBLEMS.

## FOR A. B. FROM STATE UNIVERSITIES.

1	University of North Dakota.....	122	1	0.82
2	University of Washington.....	120	1	.83

## FOR B. S. FROM STATE UNIVERSITIES.

1	University of North Dakota.....	122	1	0.82
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of North Dakota.....	122	1	0.82
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## BIBLIOGRAPHY.

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	Pennsylvania State College.....	132	1	0.76
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## DRAFTING, DRAWING, ETC.

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	College of Hawaii.....	128	4	3.13
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## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	142	2	1.41
2	Wesleyan University.....	120	2	1.66
3	Lafayette College.....	134	4	2.98
4	Catholic University of America (school of sciences).....	173	11	6.35

TABLE 38.—*College requirements in miscellaneous subjects for the bachelor's degree—Con.*

## DRAFTING, DRAWING, ETC.—Continued.

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Hours required in hygiene.	Per cent required in hygiene.
1	Catholic University of America (medical group, school of sciences)....	172	6	3.48

## MECHANICS.

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (school of sciences).....	173	6	3.46
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## LIBRARY METHODS.

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of Oregon.....	120	2	1.66
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## MISCELLANEOUS SUBJECTS.

Under this heading are included hygiene, public speaking, etc. art, drafting and drawing, mechanics, bibliography, library methods, and matriculation lectures. (See Table 38.)

## HYGIENE.

Hygiene as a distinct subject is required for the A. B. degree by the University of California, which requires 2 semester hours and by 6 endowed schools, Syracuse, Wells, and Wesleyan with 2 semester hours; Smith and Wellesley with 4 semester hours. The highest requirement is 6 semester hours made by Washington and Lee. Syracuse and Wesleyan Universities require hygiene for the B. S. degree just as for the A. B. degree. Columbia requires 2 semester hours for the educational degree.

Hygiene is taught by many other universities and colleges in connection with physical training, but these courses are not included in the present discussion.

*Summary of frequencies—hygiene.*

A. B. (STATE).	A. B. (ENDOWED).
1 requires 2 semester hours—1.71 per cent.	2 require 1 semester hour—0.83 to 0.87 per cent.
	1 requires 2 semester hours—1.66 per cent.
	2 require 4 semester hours—3.33 to 3.38 per cent.
	1 requires 6 semester hours—4.76 per cent.

*Summary frequencies—hygiene—Continued.*

B. S. (STATE).	B. S. (ENDOWED).
None.	1 requires 1 semester hour—0.83 per cent.
	1 requires 2 semester hours—1.66 per cent.
B. ED., ETC. (STATE).	B. ED., ETC. (ENDOWED).
None.	1 requires 2 semester hours—1.66 per cent.

**PUBLIC SPEAKING, ETC.**

Public speaking, oratory, etc., are required by a few schools for all types of cultural bachelor's degrees, with the exception of the Litt. B. degree. The quantity prescribed varies from 1 to 4 semester hours.

The University of Vermont prescribes 4 semester hours of public speaking for the A. B., B. S., B. Ed., and the Ph. B. degrees. Johns Hopkins and Wells prescribe 1 semester hour and Syracuse and Wesleyan 2 semester hours for the A. B. degree. Wesleyan University requires 2 semester hours in this subject also for the B. S. degree, while Pittsburg requires 4 semester hours for the degree in education.

**ART.**

The study of art or art appreciation is required by 3 colleges. Rutgers prescribes 2 semester hours for the A. B., B. S., and Litt. B. degrees. Pennsylvania State College requires 1 semester hour and Oberlin 2 semester hours.

**FREEHAND DRAWING.**

Freehand drawing is prescribed by the Catholic University as a part of the A. B. course preparatory to the study of medicine. The requirement is 6 semester hours.

**DRAWING OR DRAFTING.**

The College of Hawaii prescribes 4 semester hours of drawing for the B. S. degree. Rutgers College also requires 4 semester hours in this subject for the B. S. degree.

Tulane and Wesleyan prescribe 2 semester hours, Lafayette 4 semester hours, and the Catholic University 11 semester hours for the B. S. degree.

**MECHANICS.**

Mechanics is prescribed by the Catholic University for the B. S. degree to the extent of 6 semester hours.

**BIBLIOGRAPHY.**

Pennsylvania State College requires a 1 semester hour's course in bibliography for the A. B. degree (classical course).



## LIBRARY METHODS.

The University of Oregon requires 2 semester hours in library methods for the bachelor's degree in education.

## MATRICULATION LECTURES.

Matriculation lectures to the extent of 1 semester hour are prescribed for the A. B., B. S., and B. Ed. degrees of the University of North Dakota. Washington University also prescribes 1 semester hour in this subject for the A. B. degree. The matriculation lectures are a series of lectures given during the year to freshmen. The aim of these lectures is to help orient the student in his work and to point out and emphasize the best methods of utilizing the different advantages offered by the university. This course is prescribed by other institutions, but no college credit is given for it.

## MAJORS AND MINORS.

## (A) THE MAJOR.

Eighteen State and 12 endowed institutions require a major subject in addition to other requirements for the A. B. degree. Eight State and three endowed schools likewise require a major for the B. S. degree. Three State schools require a major for the B. Ed. degree also. A similar requirement is made for the Litt. B. by Princeton and for the Ph. B. by Brown.

Table 39 gives the different requirements for the major in ascending order. The average, median, and mode are also given.

TABLE 39.—*The table of the averages of the major subject.*

State.				Endowed.				
Institution.	A. B.	B. S.	B. Ed.	Institution.	A. B.	B. S.	Litt. B.	Ph. B.
Florida.....	18	18	.....	Princeton.....	12	12	12	.....
Delaware.....	18	.....	.....	Brown.....	18	18	.....	18
Virginia.....	18	18	.....	Oberlin.....	18-36	.....	.....	.....
Illinois.....	.....	18	.....	Pennsylvania.....	18	.....	.....	.....
Oregon.....	20-40	20-40	.....	Columbia.....	18	.....	.....	.....
Wisconsin.....	20-40	.....	.....	Swarthmore.....	18	.....	.....	.....
Alabama.....	24	24	12-24	Wesleyan.....	18	.....	.....	.....
Arizona.....	24-30	24-30	.....	De Pauw.....	24	.....	.....	.....
California.....	24	.....	.....	Tulane.....	.....	30	.....	.....
Iowa.....	24-40	.....	12-40	Beloit.....	36-48	.....	.....	.....
Nebraska.....	24-32	.....	.....	Harvard.....	36	.....	.....	.....
North Carolina.....	24	.....	.....	Leland Stanford.....	40-60	.....	.....	.....
Utah.....	24	24	.....	.....	.....	.....	.....	.....
Kansas.....	30-60	.....	.....	.....	.....	.....	.....	.....
Montana.....	30-40	30-40	.....	.....	.....	.....	.....	.....
Ohio.....	30	.....	.....	.....	.....	.....	.....	.....
Ohio State.....	.....	.....	32	.....	.....	.....	.....	.....
Maine.....	36-48	.....	.....	.....	.....	.....	.....	.....
Average.....	25	22	19.33	Average.....	23.2	20	12	18
Median.....	24	22	.....	Median.....	18	.....	.....	.....
Mode.....	24	18 or 24	.....	Mode.....	18	.....	.....	.....

TABLE 40.—Major and minor requirements.

## A. B. DEGREE.

State.						Endowed.					
Institution.	Major.	First minor.	Second minor.	Third minor.	Total semester hours.	Institution.	Major.	First minor.	Second minor.	Third minor.	Total semester hours.
Mississippi.....	{ 6 9	6	6 or	.....	18	Smith.....	6	6	.....	.....	12
Cornell (N. Y.).....	One.	One.	.....	.....	20	Johns Hopkins.....	6	6	.....	.....	12
Idaho.....	16-20	6-10	.....	.....	22	Yale.....	One.	One.	.....	.....	24
West Virginia.....	20-25	5-10	.....	.....	30	Colgate.....	20	10	.....	.....	30
Nevada.....	One.	One.	One.	.....	30	Vanderbilt.....	18	6	6	.....	30
Tennessee.....	18	12	.....	.....	30	Colorado.....	{ One or One.	{ One. One.	One.	.....	30
Oklahoma.....	20	12	.....	.....	32	Goucher.....	One and related topics.				30
Missouri.....	24	12	.....	.....	36	Pittsburg.....	24	12	.....	.....	36
Michigan.....	12	12	12	.....	36	Amherst.....	18	18	.....	.....	36
Miami.....	12-18	12-18	12	.....	36	Grinnell.....	20	16	.....	.....	36
Illinois.....	20	20	.....	.....	40	Syracuse.....	24	12	.....	.....	36
Vermont.....	18	12	12	.....	42	Wellesley.....	18	18	.....	.....	36
New Mexico.....	32	12	.....	.....	44	Columbia.....	18	18	.....	.....	36
Texas.....	28	16	.....	.....	44	Wells.....	18-18	18 or 9	9	.....	36
Wyoming.....	26	15	15	.....	46	Bowdoin.....	18	18	12	.....	42
Colorado.....	40	5	5	.....	50	Lafayette.....	18	12	12	.....	42
Indiana.....	30	20	.....	.....	50	Williams.....	42	One.	One.	.....	+42
Ohio State.....	36	18	.....	.....	54	Western Reserve.....	24	18	.....	.....	42
N. Dakota.....	24	16	16	.....	56	Dartmouth.....	One.	One.	.....	.....	42
Arkansas.....	30	18	12	.....	60	New York.....	18	12	12	.....	42
S. Dakota.....	24	12	12	12	60	Tufts.....	18	12	12	.....	42
Minnesota.....	42	24	18	.....	84	Baker.....	24	12	12	.....	48
						Carleton.....	18+12	12	12	.....	54
						Northwestern.....	24	18	18	.....	60
						Earlham.....	36	12	12	12	72

## B. S. DEGREE.

Mississippi.....	{ 9 6	9 or 6	.....	.....	18	Colgate.....	20	10	.....	.....	30
Idaho.....	16-20	6-10	6	.....	22	Vanderbilt.....	18	12	.....	.....	30
New Hampshire.....	18	18	.....	.....	36	Pittsburg.....	24	12	.....	.....	36
Vermont.....	18	12	12	.....	42	Columbia.....	18	18	.....	.....	36
N. Dakota.....	24	16	16	.....	56	Syracuse.....	24	18	.....	.....	36
Nebraska.....	One.	One.	.....	.....	60	Bowdoin.....	18	12	12	.....	42
						Dartmouth.....	One.	One.	.....	.....	42
						Lafayette.....	18	12	12	.....	42
						New York.....	18	12	12	.....	42
						Tufts.....	18	12	12	.....	42
						Carleton.....	18+12	12	12	.....	54
						Northwestern.....	24	18	18	.....	60
						Earlham.....	36	12	12	12	72

## B. ED. DEGREE.

Howard.....	.....	.....	.....	.....	30	Johns Hopkins.....	12	{ 8 or 4 4 }	.....	20
Nevada.....	.....	.....	.....	.....	30	George Washington.....	18	10	.....	28
Oklahoma.....	20	12	.....	.....	32	Pittsburgh.....	20	10	.....	30
N. Mexico.....	One.	One.	.....	.....	32					
Colorado.....	40	5	5	.....	50					
N. Dakota.....	24	16	16	.....	56					
Arkansas.....	30	18	12	.....	60					

## PH. B. DEGREE.

Vermont.....	18	12	12	.....	42	Lafayette.....	18	12	12	.....	42
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## (b) THE MAJOR AND MINORS.

Twenty-two State and 25 endowed institutions have definite major and minor requirements for the A. B. degree. The total amount of the major and minors varies from 18 to 84 semester hours, the former amount being required by Mississippi and the latter by Minnesota. Table 40 shows approximately the distribution of the majors and minors besides giving the number of semester hours required in each.

It is evident that the average total major and minor requirements for the A. B. (State) exceed those of the A. B. (endowed), the B. S. (State), the B. Ed. (State and endowed). The B. S. (endowed) requires the highest number, nearly 3 semester hours more than for the A. B. (State). The relation between the major and the corresponding minors shows a general tendency to have the sum of the minor requirements equal to those of the major.

It might be expected that concentration obtained through the major and minors for the B. Ed. degree, both State and endowed, would be less, inasmuch as education, the usual major, is included in the prescribed subjects. But if we compare the average amount prescribed for the different degrees it is evident that there is little difference to be found in the relative concentration gained by the corresponding majors and minors, with the exception of the B. Ed. (endowed) which shows a large decrease in major and minor concentration which is partly offset by the increase of prescribed subjects. The strongest combination is the B. S. (endowed) with the average of 5.45 prescribed subjects plus an average of 42.8 semester hours of major and minor subjects.

TABLE 4].—*The averages of the major and minors.*

Degree.	Average graduation requirements in semester hours.	Major.				First minor.				Second minor.				Third minor.				Total.			
		Mini-mum.	Maxi-mum.	Aver-age.	Me-dian.	Mode.	Mini-mum.	Maxi-mum.	Aver-age.	Me-dian.	Mode.	Mini-mum.	Maxi-mum.	Aver-age.	Me-dian.	Mode.	Mini-mum.	Maxi-mum.	Aver-age.	Me-dian.	Mode.
A. B. (State)...	122.75	9	42	24.3	24	...	5	24	13.25	12	12	5	18	12.00	12	12	20	84	40.0	36	...
A. B. (endowed)...	126.62	6	42	20.5	18	...	6	18	12.70	12	12	6	18	11.70	12	12	12	72	37.5	36	...
B. S. (State)...	126.18	9	24	17.1	18	...	6	18	12.60	14	...	...	...	...	...	...	18	60	38.5	36	...
B. S. (endowed)...	124.02	18	36	21.4	18	...	10	18	12.90	12	12	12	18	11.30	...	...	30	72	42.8	42	42
B. Educ. (State)...	123.93	18	40	26.4	24	...	5	18	12.60	12	...	5	12	11.2	12	...	24	60	39.1	32	...
B. Educ. (endowed)...	124.00	12	20	16.6	18	...	4	10	8.00	...	...	...	...	(4.00)	...	...	20	30	26.0	28	...
Ph. B. (State)...	126.00	...	...	(18.00)	...	...	...	...	(12.00)	...	...	...	...	(12.00)	...	...	...	...	(42)	(42)	...
Ph. B. (endowed)...	...	...	...	(18.00)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Litt. B. (State)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Litt. B. (endowed)...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...

Ratio of total major and minors to total semester hours for the different degrees: A. B. (State), 32.5 per cent; A. B. (endowed), 29.6 per cent; B. S. (State), 30.5 per cent; B. S. (endowed), 34.5 per cent; B. Ed. (State) 31.5 per cent; B. Ed. (endowed), 20.9 per cent.

## PHYSICAL TRAINING—MILITARY DRILL.

Physical training alone or in combination with military drill is prescribed for the bachelor's degree by 30 of 51 State, and by 15 of the 50 endowed schools of our list. The credits gained in these subjects are included in the total number of semester hours required for graduation.

Likewise, 9 State and 12 endowed institutions prescribe these subjects but no credit is given on the total number of hours prescribed. There are 10 State and 17 endowed schools which do not announce physical training, etc., as a requirement for the bachelor's degree. One institution (Syracuse) prescribes a course in swimming for the A. B. degree but no credit is granted. (See Appendix A.)

TABLE 42.—*Total prescribed college graduation requirements for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Total pre- scribed hours.	Per cent of pre- scribed hours.
1	University of Nebraska.....	121	4	3.30
2	University of Arkansas.....	126	6	4.76
3	University of Wyoming.....	123	6	4.87
4	University of Michigan.....	120	6	5.00
5	University of Colorado.....	120	12	10
6	Cornell University (N. Y.).....	120	12	10
7	University of Nevada.....	120	12	10
8	University of Maine.....	107	14	13.09
9	University of Porto Rico.....	120	16	13.33
10	University of South Dakota.....	128	18	14.05
11	Howard University (D. C.).....	120	18	15
12	State University of Iowa.....	120	18	15
13	University of Oregon.....	120	20	16.66
14	University of Wisconsin.....	120	22	18.33
15	University of Florida.....	120	24	20
16	University of Montana.....	120	24	20
17	Indiana University.....	120	25	20.85
18	University of Oklahoma.....	122	28	22.93
19	University of Kansas.....	120	30	25
20	University of Tennessee.....	120	30	25
21	University of Missouri.....	122	34	27.85
22	University of California (plan A).....	117	35	29.94
23	Howard University (D. C.).....	120	36	30
24	University of North Dakota.....	122	37	30.32
25	University of Utah.....	120	37	36.83
26	University of California (plan B).....	117	38	32.49
27	University of Minnesota.....	120	39	32.5
28	University of Illinois.....	123	40	32.50
29	University of Arizona.....	120	40	33.33
30	University of Vermont.....	126	42	33.33
31	University of Kentucky.....	128	43	33.58
32	West Virginia University.....	124	46	37.08
33	Miami University.....	120	46	38.33
34	University of Texas.....	120	48	40
35	University of New Mexico.....	120	50	41.56
36	University of North Carolina (group 1).....	120	50	41.65
37	Ohio State University.....	120	50	41.65
38	University of North Carolina (group 2).....	120	52	43.33
39	Ohio University.....	120	52	43.33
40	University of South Carolina.....	138	54	39.12
41	University of North Carolina.....	120	54	45
42	University of Idaho.....	120	56	46.66
43	State College of Washington.....	150	60	40
44	Delaware College.....	128	60	46.87
45	University of Mississippi.....	130	60	46.13
46	University of Washington.....	120	65	54.16
47	University of Alabama.....	120	70	58.33
48	University of Georgia.....	130	70	53.83
49	Louisiana State University.....	136	72	52.92
50	Rutgers College (N. J.).....	132	78	59.03
51	College of William and Mary.....	120	80	66.68
52	Pennsylvania State College.....	132	83	62.68
53	University of Virginia.....	120	96	80

TABLE 42.—*Total prescribed college graduation requirements for the bachelor's degree—Continued.*

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES

	Institution.	Total semester hours required.	Total pre-scribed hours.	Per cent of pre-scribed hours.
1	Western Reserve University.....	122	14	11.46
2	Wesleyan University.....	120	16	13.33
3	University of Pittsburgh.....	128	18	14.05
4	Harvard University.....	120	18	15.00
5	Yale University.....	120	18	15.00
6	Bowdoin College.....	120	22	17.64
7	Beloit College.....	120	24	20
8	Dartmouth College.....	120	24	20
9	Colgate University.....	136	25	18.37
10	Earlham College.....	120	26	21.66
11	Northwestern University.....	120	30	25
12	University of Pennsylvania.....	120	30	25
13	Tufts College.....	120	30	25
14	Washington University (St. Louis).....	120	30	25
15	Williams College.....	124	32	25.79
16	Wellesley College.....	118	34	28.79
17	Oberlin College.....	118	36	30.48
18	Swarthmore College.....	124	37	29.32
19	Trinity College (group A).....	128	38	29.67
20	Amherst College.....	122	38	31.14
21	De Pauw University.....	120	38	31.66
22	Syracuse University.....	120	39	32.50
23	Vassar College.....	111	39	35.45
24	Smith College.....	120	40	33.33
25	Carleton College.....	120	41	34.16
26	Baker University.....	120	42	35
27	Trinity College (group B).....	128	44	34.37
28	Princeton University.....	126	46	36.50
29	Johns Hopkins University.....	125	47	37.60
30	Washington and Lee University.....	126	48	38.09
31	Columbia University.....	120	48	40
32	Vanderbilt University.....	128	50	39.05
33	Bryn Mawr College.....	120	50	41.65
34	Colorado College.....	120	50	41.65
35	Grinnell College.....	120	50	41.65
36	New York University.....	120	54	46
37	Tulane University (literary course).....	128	56	43.73
38	Tulane University (classical course).....	128	58	45.29
39	Haverford College.....	128	58	45.29
40	Goucher College.....	120	58	48.32
41	Wells College.....	115	58	50.40
42	George Washington University (group 3).....	120	60	50
43	University of Chicago.....	120	63	52.27
44	Lafayette College.....	130	64	49.20
45	Union University (course B).....	138	66	47.82
46	Brown University.....	120	66	55
47	George Washington University (groups 1, 2, 4).....	120	66	55
48	Union University (course A).....	138	70	50.72
49	Hamilton College.....	124	76	61.25
50	Randolph-Macon College.....	128	80	62.48
51	George Washington University (medical group).....	120	82	68.33
52	Catholic University of America (school of sciences).....	168	86	57.17
53	University of the South.....	136	90	66.15
54	Muhlenberg College.....	140	108	77.13
55	Catholic University of America (economics group, school of philosophy).....	166	122	74.55
56	Catholic University of America (school of philosophy).....	154	122	79.50
57	Catholic University of America (school of letters).....	152	128	84.20
58	Catholic University of America (medical group, school of sciences).....	172	138	80.20

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nebraska.....	121	4	3.30
2	New Hampshire College.....	132	6	4.54
3	University of Nevada.....	120	12	10
4	University of Porto Rico.....	120	16	13.33
5	University of Florida.....	120	24	20
6	University of North Dakota.....	122	37	30.32
7	College of Hawaii.....	128	40	31.24
8	University of Arizona.....	120	50	41.66
9	University of Illinois.....	123	51	41.45
10	University of South Carolina.....	138	54	39.12
11	Howard University.....	120	54	45

TABLE 42.—*Total prescribed college graduation requirements for the bachelor's degree—Continued.*

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Total pre- scribed hours.	Per cent of pre- scribed hours.
12	State College of Washington.....	150	60	40
13	University of Mississippi.....	130	60	46.13
14	Delaware College.....	128	60	46.87
15	University of Virginia.....	120	60	50
16	University of Idaho.....	120	60	50
17	University of Vermont.....	132	64	48.44
18	University of Alabama.....	120	66	55
19	University of Kentucky.....	128	77	60.13
20	Rutgers College (N. J.).....	135	80	60.57
21	College of William and Mary.....	120	80	66.66
22	University of Virginia.....	120	96	80

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	128	18	14.05
2	Harvard University.....	120	18	15
3	Beloit College.....	120	24	20
4	Dartmouth College.....	120	24	20
5	Earlham College.....	120	26	21.66
6	Bowdoin College.....	120	28	23.52
7	Carleton College.....	120	29	24.16
8	Syracuse University.....	120	31	25.83
9	Colgate University.....	136	40	29.40
10	Wesleyan University.....	120	40	33.33
11	Princeton University.....	126	42	33.33
12	Grinnell College.....	120	46	38.33
13	Columbia University.....	120	47	39.16
14	New York University.....	120	48	40
15	Lafayette College.....	134	53	39.52
16	Vanderbilt University.....	128	56	43.73
17	Haverford College.....	128	58	45.29
18	Northwestern University.....	120	64	53.33
19	University of Chicago.....	120	70	58.37
20	Randolph-Macon College.....	128	70	59.67
21	Hamilton College.....	124	76	61.25
22	Union University.....	138	78	56.52
23	Tulane University.....	142	82	57.75
24	University of the South.....	136	94	69.09
25	Tufts College.....	120	96	80
26	Catholic University of America (school of sciences).....	173	99	57.20
27	Muhlenberg College.....	140	126	90

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Michigan.....	120	17	14.16
2	University of Nebraska.....	121	25	20.67
3	University of Nevada.....	120	30	25
4	University of Utah (A. B. group).....	120	31	25.83
5	University of Oregon.....	120	34	28.33
6	University of Idaho.....	120	35	29.15
7	University of Colorado.....	120	36	30
8	University of Arkansas.....	126	38	30.26
9	State University of Iowa.....	120	38	31.66
10	University of Minnesota.....	120	39	32.50
11	University of Utah (B. S. group).....	120	42	35
12	University of Wyoming.....	123	44	35.76
13	University of New Mexico.....	128	47	36.70
14	University of Washington.....	124	48	38.68
15	University of Oklahoma.....	128	52	40.60
16	University of Kansas.....	132	54	40.88
17	University of Florida.....	120	54	45
18	University of Tennessee.....	120	57	47.50
19	University of Missouri.....	120	58	48.32
20	University of North Dakota.....	122	63	51.63
21	Howard University (D. C.).....	126	72	57.13
22	University of Texas.....	126	72	57.13
23	Ohio State University.....	120	74	61.66
24	University of Mississippi.....	130	84	64.59
25	University of Alabama.....	120	90	75
26	University of North Carolina.....	120	90	75
27	University of South Carolina.....	138	93	67.36
28	Louisiana State University.....	136	96	70.56
29	University of Vermont.....	126	97	76.97

TABLE 42.—*Total prescribed college graduation requirements for the bachelor's degree—Continued.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Total pre-scribed hours.	Per cent of pre-scribed hours.
1	University of Chicago.....	120	30	25
2	Johns Hopkins University and Goucher College.....	120	50	41.66
3	George Washington University.....	124	68	54.80
4	Columbia University.....	120	79	65.83
5	Tulane University.....	132	88	66.66
6	University of Pittsburgh.....	128	92	71.82

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (Ph. B.).....	126	34	26.97
1	Rutgers College (N. J.) (Litt. B.).....	132	78	59.05

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago (for Ph. B.).....	120	6½	5.48
2	Brown University (for Ph. B.).....	120	50	41.66
3	Lafayette College (for Ph. B.).....	130	58	44.60
4	Union University (for Ph. B.).....	138	72	52.17
5	Hamilton College (for Ph. B.).....	124	76	61.25
6	Muhlenberg College (for Ph. B.).....	140	116	83.84
7	Catholic University of America (for Ph. B.).....	152	127	83.59
1	Princeton University (for Litt. B.).....	126	42	33.33

## TOTAL PRESCRIBED COLLEGE GRADUATION REQUIREMENTS.

Table 42 shows the total number of semester hours of prescribed college work for each school for the different bachelor's degrees. All institutions of our list require some prescribed work, but the amount varies greatly.

TABLE 43.—*Prescribed college graduation requirements.*

[Semester hours.]

Degree.	Mini- mum.	Per cent.	Maxi- mum.	Per cent.	Aver- age.	Per cent.	Me- dian.	Per cent.	Mode.	Per cent.
A. B. (State).....	4	3.30	96	80.00	39.77	32.81	39	32.50	.....	.....
A. B. (endowed).....	14	11.46	138	84.20	52.96	40.13	47½	37.82	.....	.....
B. S. (State).....	4	3.30	96	80.00	52.51	41.44	60	46.13	60	46 to 50
B. S. (endowed).....	18	15.00	126	80.00	55.76	42.16	48	40.00	.....	.....
B. Ed. (State).....	17	14.16	116	86.66	58.95	47.24	54	40.88	.....	.....
B. Ed. (endowed).....	30	25.00	92	71.82	67.71	54.29	73½	60.36	.....	.....
Ph. B. (State).....	(34)	(26.97)	(34)	(26.97)	(34.00)	(26.97)	(34)	(26.97)	.....	.....
Ph. B. (endowed).....	6½	5.48	127	83.50	72.14	53.07	72	52.17	.....	.....
Litt. B. (State).....	(78)	(59.05)	(78)	(59.05)	(78.00)	(59.05)	(78)	(59.05)	.....	.....
Litt. B. (endowed).....	(42)	(33.33)	(42)	(33.33)	(42.00)	(33.33)	(42)	(33.33)	.....	.....
General average.....	.....	.....	.....	.....	51.83	40.77	.....	.....	.....	.....



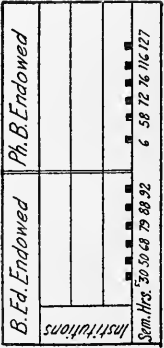
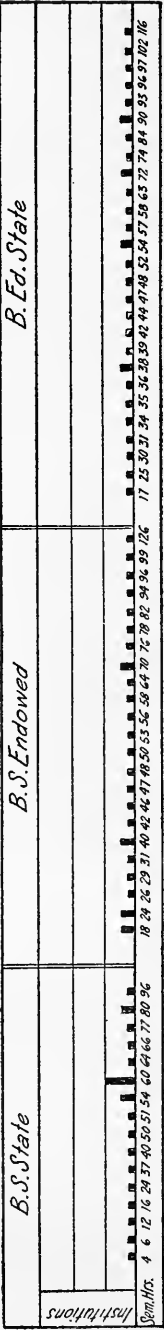
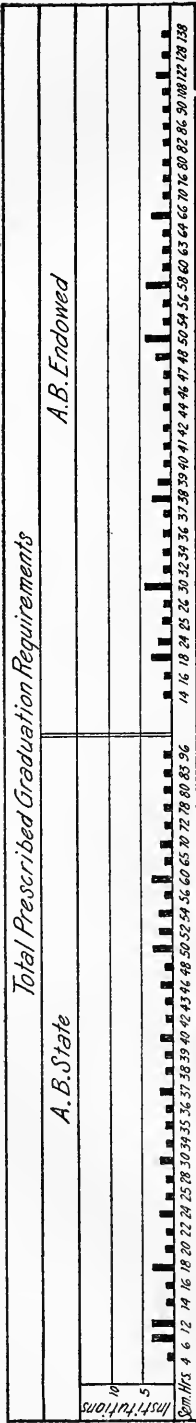
Table 43 gives characteristic features of the prescribed college graduation requirements as indicated by the minimum, maximum, average, median, and mode. The averages for the A. B. (endowed), B. S. (State), and B. S. (endowed) are somewhat higher than the general average of 51.83 semester hours, while the average for the B. Ed. (State) is over 8 semester hours higher.

The prescribed professional studies in education for the B. Ed. degree, especially of the endowed schools, greatly increase the average of prescribed work. Likewise the requirements of the small group of schools granting the Ph. B. degree show an exceptionally high average of prescribed work.

The average for the A. B. (State) is, on the other hand, 13 semester hours less than the average for the A. B. (endowed), or about 8 per cent of the total college requirements.

The most flexible course is that of the A. B. degree of the State schools. Less flexibility appears as the more rigid requirements of the B. Ed. (endowed) and the Ph. B. (endowed) are approached.

According to Graph 17 there is no frequency that exceeds 3 for the A. B. (State), none that exceed 4 for the A. B. (endowed), and, with the exception of the B. S. (State), none that exceed 2. The extreme differences of standards are manifestly apparent.



GRAPH 17.

TABLE 44.—Averages of prescribed graduation subjects for the bachelor's degree.

Subjects.	A. B.			B. S.			B. Ed.			Ph. B.			Litt. B. or L. H. B.			General average.	
	State.		Endowed.	State.		Endowed.	State.		Endowed.	State.		Endowed.	State.		Endowed.	Sem. hrs.	Per cent.
	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.	Sem. hrs.	Per cent.			
Education.....																22.25	17.43
Bible.....			6.00	4.37			7.16	5.06								6.34	4.31
Philosophy and psychol- ogy.....	7.00	5.65	7.56			8.00	6.38	5.92	4.56	5.80	4.66	8.00	6.39				
Social science.....	10.53	8.44	12.14	8.86	7.79	6.81	5.35	9.87	7.96	7.60	6.06					7.23	6.13
Science.....	11.48	9.19	11.44	8.52	22.38	19.51	13.15	13.72	10.82	8.57	10.66	8.40				10.40	8.04
Mathematics.....	7.00	5.65	6.94	5.46	8.93	7.11	8.56	6.77	7.09	5.51	(10.00)	(7.57)	(7.57)	(8.00)	(6.34)	(8.00)	(7.93)
Foreign language.....	15.19	13.80	20.66	15.94	12.09	9.58	15.62	12.79	13.04	10.69	14.85	12.00				(8.00)	(8.00)
English.....	9.02	7.50	9.65	7.44		9.65	6.34	8.77	6.81	9.24	6.63	8.33	6.78	(10.00)	(7.93)	(14.00)	(10.67)
																(4.00)	(3.17)

NOTE.—The percentage is based on the total number of cases in which a given subject is prescribed.

## COMPARISON OF THE NUMBER OF HOURS IN PRESCRIBED COLLEGE SUBJECTS.

(General averages only.)

The order of subjects with respect to the average number of semester hours required in college, all bachelor's degrees being considered, is as follows:

Education, 22.25 semester hours; foreign language, 16.82; science, 13.49; social science, 10.40; English, 9.63; mathematics, 7.61; philosophy and psychology, 7.23; and Bible, 6.34 semester hours.

According to the different degrees, the order in semester hours is as follows:<sup>1</sup>

*A. B. (State).*—Foreign language, 15.19; science, 11.48; social science, 10.55; English, 9.02; mathematics and philosophy and psychology, 7 semester hours each.

*A. B. (endowed).*—Foreign language, 20.66; social science, 12.14; science, 11.44; English, 9.65; philosophy and psychology, 7.56; mathematics, 6.94; Bible, 6 semester hours.

Social science takes second place in the *A. B. (endowed)* and third in the *A. B. (State)*. Mathematics drops behind philosophy and psychology in the *A. B. (endowed)*.

*B. S. (State).*—Science, 22.38; language, 12.09; social science, 9.70; English, 9.65; mathematics, 8.93; and philosophy and psychology, 8 semester hours.

*B. S. (endowed).*—Science, 18.15; language, 15.62; English, 8.77; mathematics, 8.56; (Bible, 7.16); social science, 6.81; philosophy and psychology, 5.92 semester hours.

English changes places with social science, being given more prominence in the endowed schools. Bible stands ahead of social science, but in view of the few instances it has little significance in that respect.

*B. Ed. (State).*—Education, 22.75; language, 13.04; science, 10.82; social science, 9.87; English, 9.24; mathematics, 7.09; philosophy and psychology, 5.80 semester hours.

*B. Ed. (endowed).*—Education, 31.50; language, 14.85; science, 10.66; mathematics, 10; English, 8.33; philosophy and psychology 8; social science, 7.60 semester hours. Social science is more prominent in the State schools. English and mathematics are more prominent in the endowed.

*Ph. B. (State).*—Language, 12; English, 10; mathematics, 8 semester hours.

*Ph. B. (endowed).*—Language, 27; philosophy and psychology, 15; social science, 14.25; English, 14; science, 11; mathematics, 7 semester hours.

<sup>1</sup> These figures, which are based on Table 44, should not be interpreted too literally. The order given is a probable order.

The State school shows less prescribed distribution.

*Litt. B. (State).*—Social science, 16; philosophy and psychology, 12; English, language, mathematics, science, 8; Bible, 2 semester hours.

*Litt. B. (endowed).*—Language, 14; science, 10; philosophy and psychology, 6; English, 4 semester hours.

MINIMUM, AVERAGE, AND MAXIMUM REQUIREMENTS (ACCORDING TO TABLE 43).

The minimum requirement in English, according to the averages of the different degrees (Table 43) is 4 semester hours *Litt. B. (endowed)*, the general average 9.63 semester hours, the maximum 14 semester hours, *Ph. B. (endowed)*.

The minimum requirement in foreign language is 8 semester hours *Litt. B. (State)*, the general average, 16.82; the maximum, 27 semester hours *Ph. B. (endowed)*.

The minimum requirement in mathematics is 6.94 semester hours, *A. B. (endowed)*; the average 7.61 semester hours; the maximum, 8.93, *B. S. (State)*.

The minimum requirement in science is 8 semester hours *Litt. B. (State and endowed)*; the average, 13.49 semester hours; the maximum 22.38 semester hours *B. S. (State)*.

The minimum requirement in social science is 6.81 semester hours *B. S. (endowed)*; the average, 10.40, and the maximum, 14.25, (*Ph. B. endowed*), the latter being closely followed by 12.14 semester hours *A. B. (endowed)*.

The minimum requirement in philosophy and psychology is 5.80 *B. Ed. (State)*; the average is 7.23 and the maximum 15 semester hours *Ph. B. (endowed)*.

The minimum requirement in Bible or religion is 2 semester hours, *Litt. B. (State)*, the average 6.34, and the maximum 9 semester hours, *Ph. B. (endowed)*.

The minimum requirement in education is 6 semester hours *Ph. B. (endowed)*, the average 22.25, and the maximum 31.50, *B. Ed. (endowed)*.

TABLE 45.—*Total elective college graduation requirements for the bachelor's degree.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Total elective hours.	Per cent of elective hours.
1	University of Virginia.....	120	24	20
2	College of William and Mary.....	120	40	33.33
3	Pennsylvania State College.....	132	49	37.17
4	University of Alabama.....	120	50	41.66
5	Rutgers College (N. J.).....	132	54	40.95
6	University of Washington.....	120	55	45.84
7	University of Georgia.....	130	60	46.17
8	Louisiana State University.....	136	64	47.08

TABLE 45.—*Total elective college graduation requirements for the bachelor's degree—Con.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Total elective hours.	Per cent of elective hours.
9	University of Idaho.....	120	64	53.33
10	University of North Carolina (group 2).....	120	66	55
11	Delaware College.....	128	68	53.12
12	Ohio University.....	120	68	56.66
13	University of North Carolina (group 3).....	120	68	56.66
14	University of Mississippi.....	130	70	53.87
15	University of New Mexico.....	120	70	58.39
16	University of North Carolina (group 1).....	120	70	58.34
17	Ohio State University.....	120	70	58.34
18	University of Texas.....	120	72	60
19	Miami University.....	120	74	61.67
20	West Virginia University.....	124	78	62.92
21	University of California (plan B).....	117	79	67.57
22	University of Arizona.....	120	80	66.66
23	University of Minnesota.....	120	81	67.50
24	University of California (plan A).....	117	82	70.06
25	University of Illinois.....	123	83	67.50
26	University of Utah.....	120	83	69.17
27	University of South Carolina.....	138	84	60.88
28	University of Vermont.....	126	84	66.88
29	Howard University (D. C.) (language group).....	120	84	70
30	University of Kentucky.....	128	85	66.42
31	University of North Dakota.....	122	85	69.68
32	University of Missouri.....	122	88	72.15
33	State College of Washington.....	150	90	60
34	University of Kansas.....	120	90	75
35	University of Tennessee.....	120	90	75
36	University of Maine.....	107	93	86.91
37	University of Oklahoma.....	122	94	77.07
38	Indiana University.....	120	95	79.15
39	University of Florida.....	120	96	80
40	University of Montana.....	120	96	80
41	University of Wisconsin.....	120	98	81.67
42	University of Oregon.....	120	100	83.34
43	Howard University (D. C.) (social science group).....	120	102	85
44	State University of Iowa.....	120	102	85
45	University of Porto Rico.....	120	104	86.66
46	University of Colorado.....	120	108	90
47	Cornell University (N. Y.).....	120	108	90
48	University of Nevada.....	120	108	90
49	University of South Dakota.....	128	110	85.95
50	University of Michigan.....	120	114	95
51	University of Wyoming.....	123	117	95.13
52	University of Nebraska.....	121	117	96.70
53	University of Arkansas.....	126	120	95.34

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (classical, and Latin-historical groups, school of letters).....	152	24	15.80
2	Catholic University of America (modern language group, school of letters).....	152	30	19.80
3	Catholic University of America (school of philosophy).....	154	32	20.50
4	Muhlenberg College.....	140	32	22.87
5	Catholic University of America (medical group, school of sciences).....	172	34	19.80
6	George Washington University (group 5).....	120	38	31.66
7	Catholic University of America (economics group).....	166	44	26.50
8	University of the South.....	136	46	33.85
9	Randolph-Macon College.....	128	48	37.52
10	Hamilton College.....	124	48	38.75
11	Brown University.....	120	54	45
12	George Washington University (groups 1, 2, 4).....	120	54	45
13	University of Chicago.....	120	56 <sup>2</sup> <sub>3</sub>	47.63
14	Wells College.....	115	57	49.60
15	George Washington University.....	120	60	50
16	Goucher College.....	120	62	51.67
17	Lafayette College.....	130	66	50.80
18	New York University.....	120	66	55
19	Union University (group A).....	138	68	49.28
20	Tulane University.....	128	70	54.71
21	Haverford College.....	128	70	54.71
22	Grinnell College.....	120	70	58.34

TABLE 45.—*Total elective college graduation requirements for the bachelor's degree—Con.*

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total semester hours required.	Total elective hours.	Per cent of elective hours.
23	Colorado College .....	120	70	58.34
24	Bryn Mawr College .....	120	70	58.35
25	Union University (group B) .....	138	72	52.18
26	Tulane University (literary group) .....	128	72	56.27
27	Columbia University .....	120	72	60
28	Vassar College .....	111	72	64.55
29	Vanderbilt University .....	128	78	60.95
30	Washington and Lee University .....	126	78	61.91
31	Johns Hopkins University .....	125	78	62.40
32	Baker University .....	120	78	65
33	Carleton College .....	120	79	65.84
34	Princeton University .....	126	80	63.50
35	Smith College .....	120	80	66.66
36	Syracuse University .....	120	81	67.50
37	Catholic University of America (school of sciences) .....	168	82	48.79
38	De Pauw University .....	120	82	68.34
39	Oberlin College .....	118	82	69.52
40	Trinity College (group B) .....	128	84	65.63
41	Amherst College .....	122	84	68.85
42	Wellesley College .....	118	84	71.21
43	Swarthmore College .....	124	87	70.17
44	Trinity College (group A) .....	128	90	70.33
45	Northwestern University .....	120	90	75
46	Tufts College .....	120	90	75
47	University of Pennsylvania .....	120	90	75
48	Washington University .....	120	90	75
49	Williams College .....	124	92	74.21
50	Earlham College .....	120	94	78.34
51	Beloit College .....	120	96	80
52	Dartmouth College .....	120	96	80
53	Bowdoin College .....	120	98	82.36
54	Harvard University .....	120	102	85
55	Yale University .....	120	102	85
56	Wesleyan University .....	120	104	86.66
57	Western Reserve University .....	122	108	88.54
58	University of Pittsburgh .....	128	110	85.95
59	Colgate University .....	136	111	81.63
60	Leland Stanford University .....	120	120	100

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Virginia .....	120	24	20
2	University of Arkansas .....	128	38	29.68
3	College of William and Mary .....	120	40	33.33
4	University of Kentucky .....	128	51	39.87
5	University of Alabama .....	120	54	45
6	Rutgers College (N. J.) .....	135	55	39.43
7	University of Idaho .....	120	60	50
8	University of Virginia (special subject) .....	120	60	50
9	Howard University (D. C.) .....	120	66	55
10	University of Vermont .....	132	68	51.36
11	Delaware College .....	128	68	53.12
12	University of Mississippi .....	130	70	53.87
13	University of Arizona .....	120	70	58.34
14	University of Illinois .....	123	72	58.54
15	University of South Carolina .....	138	84	60.88
16	University of North Dakota .....	122	85	69.08
17	College of Hawaii .....	128	88	68.75
18	State College of Washington .....	150	90	60
19	University of Florida .....	120	96	80
20	University of Porto Rico .....	120	104	86.67
21	University of Nevada .....	120	108	90
22	University of Nebraska .....	121	117	96.70
23	New Hampshire College .....	132	126	95.46

TABLE 45.—*Total elective college graduation requirements for the bachelor's degree—Con.*

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Total elective hours.	Per cent of elective hours.
1	Muhlenberg College.....	140	14	10
2	Tufts College.....	120	24	20
3	University of the South.....	136	42	30.91
4	Hamilton College.....	124	48	38.75
5	University of Chicago.....	120	50	42.15
6	Northwestern University.....	120	56	64.67
7	Randolph-Macon College.....	128	58	45.33
8	Tulane University.....	142	60	42.25
9	Union University.....	138	60	43.48
10	Haverford College.....	128	70	54.71
11	Vanderbilt University.....	128	72	56.27
12	New York University.....	120	72	60
13	Columbia University.....	120	73	60.83
14	Catholic University of America (school of sciences).....	173	74	42.80
15	Grinnell College.....	120	74	61.67
16	Wesleyan University.....	120	80	66.66
17	Lafayette College.....	134	81	60.43
18	Princeton University.....	126	84	63.50
19	Syracuse University.....	120	89	74.17
20	Carleton College.....	120	91	75.54
21	Bowdoin College.....	120	92	76.48
22	Earlham College.....	120	94	78.34
23	Colgate University.....	136	96	70.60
24	Beloit College.....	120	96	80
25	Dartmouth College.....	120	96	80
26	Harvard University.....	120	102	85
27	University of Pittsburgh.....	128	110	85.95

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	Miami University.....	120	4	3.33
2	University of Vermont.....	126	29	23.02
3	University of Georgia.....	132	30	22.77
4	University of North Carolina.....	120	30	25
5	University of Alabama.....	120	30	25
6	Louisiana State University.....	136	40	29.44
7	University of South Carolina.....	138	45	32.64
8	University of Mississippi.....	130	46	35.41
9	Ohio State University.....	120	46	38.34
10	Howard University.....	126	54	42.87
11	University of Texas.....	126	54	42.87
12	University of North Dakota.....	122	59	48.37
13	University of Missouri.....	120	62	51.68
14	University of Tennessee.....	120	63	52.50
15	University of Florida.....	120	66	55
16	University of Oklahoma.....	128	76	59.40
17	University of Washington.....	124	76	61.32
18	University of Kansas.....	132	78	59.12
19	University of Utah (B. S. group).....	120	78	65
20	University of Wyoming.....	123	79	64.24
21	University of New Mexico.....	128	81	63.30
22	University of Minnesota.....	120	81	67.50
23	State University of Iowa.....	120	82	68.33
24	University of Colorado.....	120	84	70
25	University of Idaho.....	120	85	70.84
26	University of Oregon.....	120	86	71.67
27	University of Arkansas.....	126	88	69.84
28	University of Utah (A. B. group).....	120	89	74.17
29	University of Nevada.....	120	90	75
30	University of Nebraska.....	121	96	79.33
31	University of Michigan.....	120	103	85.87



TABLE 45.—*Total elective college graduation requirements for the bachelor's degree—Con.*  
FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total semester hours required.	Total elective hours.	Per cent of elective hours.
1	University of Pittsburgh.....	128	36	28.11
2	Columbia University.....	120	41	34.17
3	Tulane University.....	132	44	33.33
4	George Washington University.....	124	56	45.20
5	Johns Hopkins University and Goucher College.....	120	70	50.33
6	University of Chicago.....	120	90	75

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	126	92	73.02
1	Rutgers College (N. J.) (for Litt. B.).....	132	54	40.95

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Muhlenberg College (for Ph. B.).....	140	24	17.16
2	Catholic University of America (for Ph. B.).....	152	25	16.50
3	Hamilton College (for Ph. B.).....	124	48	38.75
4	Union University (for Ph. B.).....	138	66	47.82
5	Brown University (for Ph. B.).....	120	70	58.31
6	Lafayette College (for Ph. B.).....	130	72	55.40
7	University of Chicago.....	120	113½	94.52
1	Princeton University (for Litt. B.).....	126	84	63.50

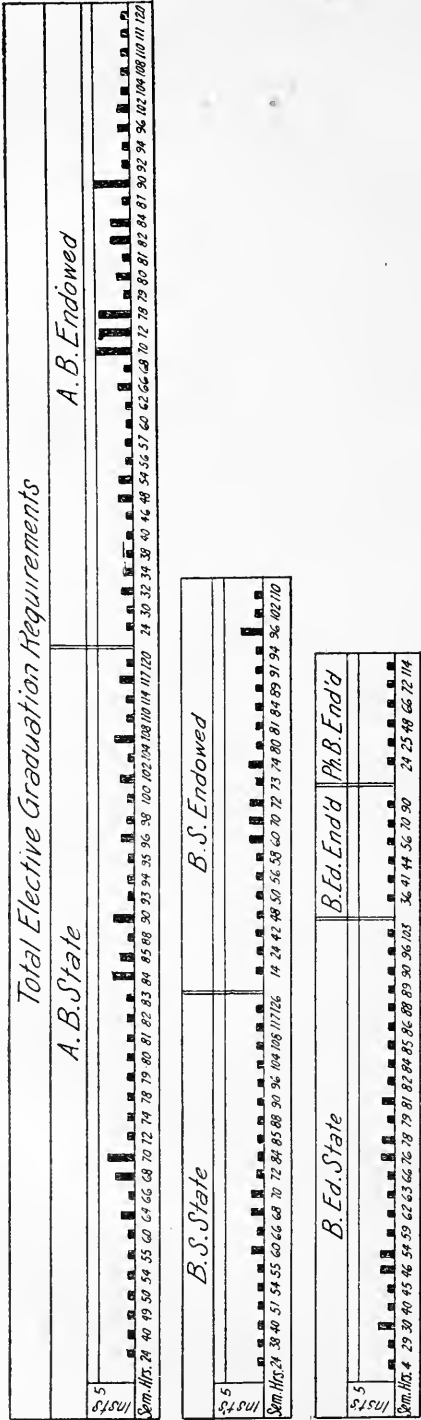
## TOTAL ELECTIVE COLLEGE GRADUATION REQUIREMENTS.

TABLE 46.—*Elective college graduation requirements.*

[Semester hours.]

Degree.	Minimum.	Per cent.	Maximum.	Per cent.	Average.	Per cent.	Median.	Per cent.
A. B. (State).....	24	20.00	120	95.34	81.04	65.98	84	70.00
A. B. (endowed).....	24	15.80	111	81.63	73.81	58.95	78	61.91
B. S. (State).....	24	15.80	126	95.46	73.65	58.51	70	53.87
B. S. (endowed).....	14	10.00	110	85.95	68.52	55.73	72½	60.41
B. Ed. (State).....	4	3.33	103	85.87	64.83	52.32	76	59.40
B. Ed. (endowed).....	36	28.11	90	75.00	56.16	44.34	50	39.26
Ph. B. (State).....	(92)	(73.02)	(92)	(73.02)	(92.00)	(73.02)	(92)	(73.02)
Ph. B. (endowed).....	24	17.16	84	63.50	59.85	56.00	66	47.83
Litt. B. (State).....	(54)	(40.45)	(54)	(40.45)	(54.00)	(40.45)	(54)	(40.45)
Litt. B. (endowed).....	(84)	(63.05)	(84)	(63.05)	(84.00)	(63.05)	(84)	(63.05)
General average.....					73.05	59.04		

The characteristics of the electives in Tables 45, 46, and Graph 18 are in harmony with the facts brought out in the paragraph on prescribed college graduation requirements.



GRAPH 18.

TABLE 47.—*Total college semester hours for the bachelor's degree; physical training and military training excluded.*

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total hours.
1	University of Maine.....	107
2	University of California.....	117
3	University of Alabama.....	120
4	University of Arizona.....	120
5	University of Colorado.....	120
6	Howard University.....	120
7	University of Florida.....	120
8	University of Idaho.....	120
9	Indiana University.....	120
10	State University of Iowa.....	120
11	State University of Kansas.....	120
12	State University of Michigan.....	120
13	State University of Minnesota.....	120
14	State University of Montana.....	120
15	State University of New Mexico.....	120
16	Cornell University (N. Y.).....	120
17	University of Nevada.....	120
18	University of North Carolina.....	120
19	Ohio State University.....	120
20	Ohio University.....	120
21	Miami University.....	120
22	University of Oregon.....	120
23	University of Porto Rico.....	120
24	University of Tennessee.....	120
25	University of Texas.....	120
26	University of Utah.....	120
27	University of Vermont.....	120
28	University of Washington.....	120
29	College of William and Mary.....	120
30	University of Wisconsin.....	120
31	University of Nebraska.....	121
32	University of Missouri.....	122
33	University of North Dakota.....	122
34	University of Oklahoma.....	122
35	University of Illinois.....	123
36	University of Wyoming.....	123
37	West Virginia University.....	124
38	University of Arkansas.....	126
39	University of Vermont.....	126
40	Delaware College.....	128
41	University of Kentucky.....	128
42	University of South Dakota.....	128
43	University of Georgia.....	130
44	University of Mississippi.....	130
45	Rutgers College (N. J.).....	132
46	Pennsylvania State College.....	132
47	Louisiana State University.....	136
48	University of South Carolina.....	138
49	State College of Washington.....	150

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total hours.
1	Vassar College.....	111
2	Wells College.....	115
3	Oberlin College.....	118
4	Wellesley College.....	118
5	Baker University.....	120
6	Brown University.....	120
7	Bowdoin College.....	120
8	Bryn Mawr College.....	120
9	Carleton College.....	120
10	University of Chicago.....	120
11	Colorado College.....	120
12	Columbia University.....	120
13	Dartmouth College.....	120
14	Beloit College.....	120
15	De Pauw University.....	120
16	Earlham College.....	120
17	George Washington University.....	120
18	Goucher College.....	120
19	Grinnell College.....	120
20	Harvard University.....	120
21	Leland Stanford University.....	120
22	New York University.....	120

TABLE 47.—*Total college semester hours for the bachelor's degree; physical training and military training excluded—Continued.*

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total hours.
23	Northwestern University.....	120
24	University of Pennsylvania.....	120
25	Smith College.....	120
26	Syracuse University.....	120
27	Tufts College.....	120
28	Washington University (St. Louis).....	120
29	Wesleyan University.....	120
30	Yale University.....	120
31	Amherst College.....	122
32	Western Reserve University.....	122
33	Hamilton College.....	124
34	Swarthmore College.....	124
35	Williams College.....	124
36	Johns Hopkins University.....	125
37	Princeton University.....	126
38	Washington and Lee University.....	126
39	Haverford College.....	128
40	University of Pittsburgh.....	128
41	Randolph-Macon College.....	128
42	Trinity College (N. C.).....	128
43	Tulane University.....	128
44	Vanderbilt University.....	128
45	Lafayette College.....	130
46	Colgate University.....	136
47	University of the South.....	136
48	Union University.....	138
49	Muhlenberg College.....	140
50	Catholic University of America (school of letters).....	152
51	Catholic University of America (school of philosophy).....	154
52	Catholic University of America (economics group, school of philosophy).....	166
53	Catholic University of America (school of sciences).....	168
54	Catholic University of America (medical group, school of sciences).....	172

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Alabama.....	120
2	University of Arizona.....	120
3	Howard University (D. C.).....	120
4	University of Florida.....	120
5	University of Idaho.....	120
6	University of Nevada.....	120
7	University of Porto Rico.....	120
8	University of Virginia.....	120
9	College of William and Mary.....	120
10	University of Nebraska.....	121
11	University of North Dakota.....	122
12	University of Illinois.....	123
13	Delaware College.....	128
14	College of Hawaii.....	128
15	University of Kentucky.....	128
16	University of Mississippi.....	130
17	New Hampshire College.....	132
18	University of Vermont.....	132
19	Rutgers College (N. J.).....	135
20	University of South Carolina.....	138
21	State College of Washington.....	150

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Beloit College.....	120
2	Carleton College.....	120
3	Columbia University.....	120
4	Dartmouth College.....	120
5	Earlham College.....	120
6	Grinnell College.....	120
7	Harvard University.....	120
8	New York University.....	120
9	Northwestern University.....	120
10	Syracuse University.....	120
11	Tufts College.....	120
12	Wesleyan University.....	120

TABLE 47.—*Total college semester hours for the bachelor's degree; physical training and military training excluded—Continued.*

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Total hours.
13	University of Chicago.....	120
14	Hamilton College.....	121
15	Princeton University.....	126
16	Haverford College.....	128
17	University of Pittsburgh.....	128
18	Randolph-Macon College.....	128
19	Vanderbilt University.....	128
20	Lafayette College.....	131
21	Colgate University.....	136
22	University of the South.....	136
23	Union University.....	138
24	Muhlenberg College.....	140
25	Tulane University of Louisiana.....	142
26	Catholic University of America (school of sciences).....	173

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Alabama.....	120
2	University of Colorado.....	120
3	University of Florida.....	120
4	University of Idaho.....	120
5	State University of Iowa.....	120
6	University of Michigan.....	120
7	University of Minnesota.....	120
8	University of Missouri.....	120
9	University of Nevada.....	120
10	University of North Carolina.....	120
11	Ohio State University.....	120
12	Miami University.....	120
13	University of Oregon.....	120
14	University of Tennessee.....	120
15	University of Utah.....	120
16	University of Nebraska.....	121
17	University of North Dakota.....	122
18	University of Wyoming.....	123
19	University of Washington.....	124
20	University of Arkansas.....	126
21	Howard University (D. C.).....	126
22	University of Texas.....	126
23	University of Vermont.....	126
24	University of Oklahoma.....	128
25	University of New Mexico.....	128
26	University of Mississippi.....	130
27	University of Georgia.....	132
28	University of Kansas.....	132
29	Louisiana State University.....	136
30	University of South Carolina.....	138

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	120
2	Columbia University.....	120
3	Johns Hopkins University and Goucher College.....	120
4	George Washington University.....	124
5	University of Pittsburgh.....	128
6	Tulane University.....	132

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	126
1	Rutgers College (N. J.) (for Litt. B.).....	132

TABLE 47.—*Total college semester hours for the bachelor's degree; physical training and military training excluded—Continued.*

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Total hours.
1	University of Chicago (for Ph. B.).....	120
2	Brown University (for Ph. B.).....	120
3	Hamilton College (for Ph. B.).....	124
4	Lafayette College (for Ph. B.).....	130
5	Union University (for Ph. B.).....	138
6	Muhlenberg College (for Ph. B.).....	140
7	Catholic University of America (for Ph. B.).....	152
1	Princeton University (for Litt. B.).....	126

**TOTAL COLLEGE GRADUATION REQUIREMENTS.**

The total graduation requirements in semester hours for the different bachelor's degrees exhibit a considerable lack of uniformity. The requirements vary from 107 to 173 semester hours (physical training and military science not being included). (See Table 47.)

The schools requiring less than 120 semester hours (physical training, etc., excluded) are as follows: For the A. B. degree, Maine, 107 semester hours (plus 18 semester hours physical training or military science or both); California, 117 (plus 7 semester hours military science); for the B. S. degree, Vassar, 111 semester hours; Wells, 115; Oberlin and Wellesley, 118 semester hours.

The highest requirements, or above 130 semester hours, are found to be as follows for the A. B. degree: Rutgers, Pennsylvania State College, 132 semester hours; Louisiana, 136 semester hours; South Carolina, 138 semester hours; and the State College of Washington, 150 semester hours, which is the highest total requirement of the State schools; also Colgate and University of the South, 136 semester hours; Union, 138; Muhlenberg, 140 semester hours; the Catholic University with curricula carrying 152, 154, 162, to 172 semester hours.

For the B. S. degree, New Hampshire and Vermont, 132 semester hours; Rutgers, 135; South Carolina, 138; and State College of Washington, 150 semester hours; also Lafayette, 134 semester hours; Colgate and University of the South, 136 semester hours; Union, 138 semester hours; Muhlenberg, 140; Tulane, 142; and Catholic University, 173 semester hours.

For the B. Ed. degree, Georgia and Kansas, 132 semester hours; Louisiana, 136 semester hours; and South Carolina, 138 semester hours; also Tulane, 132 semester hours for the educational degree.

Rutgers requires 132 semester hours for the Litt. B. degree, 138, 140, and 152 semester hours being required for the Ph. B. degree by Union, Muhlenberg, and Catholic University.

TABLE 48.—*Total college graduation requirements.*

(Semester hours.)

Degree.	Average.	Median.	Mode.
A. B. (State).....	122.75	120	120
A. B. (endowed).....	126.62	120	120
B. S. (State).....	126.18	122½	120
B. S. (endowed).....	124.02	120	120
B. Ed. (State).....	123.93	120½	120
B. Ed. (endowed).....	124.00	122	120
Ph. B. (State).....	(126.00)	(126)	(126)
Ph. B. (endowed).....	132.00	130	None.
Litt. B. (State).....	132.00	(132)	(132)
Litt. B. (endowed).....	126.00	(126)	(126)
General average.....	125.25		

The most noticeable deviations from the general average of total requirements according to Table 48 is that of the A. B. degree of the State schools, which is 2.50 semester hours less than the general average, 125.25 semester hours. The requirements for the Ph. B. of both State and endowed schools are almost 7 semester hours higher than the general average requirements. The medians and modes for the different degrees show great uniformity if the Ph. B. and Litt. B. degrees are eliminated.

Graph 19 indicates the predominance of the 120 semester hour requirement. The next in order is 128 semester hours, which is characteristic for all degrees with the exception of the B. Ed. (State), B. Ed. (endowed), and the Ph. B. (endowed).

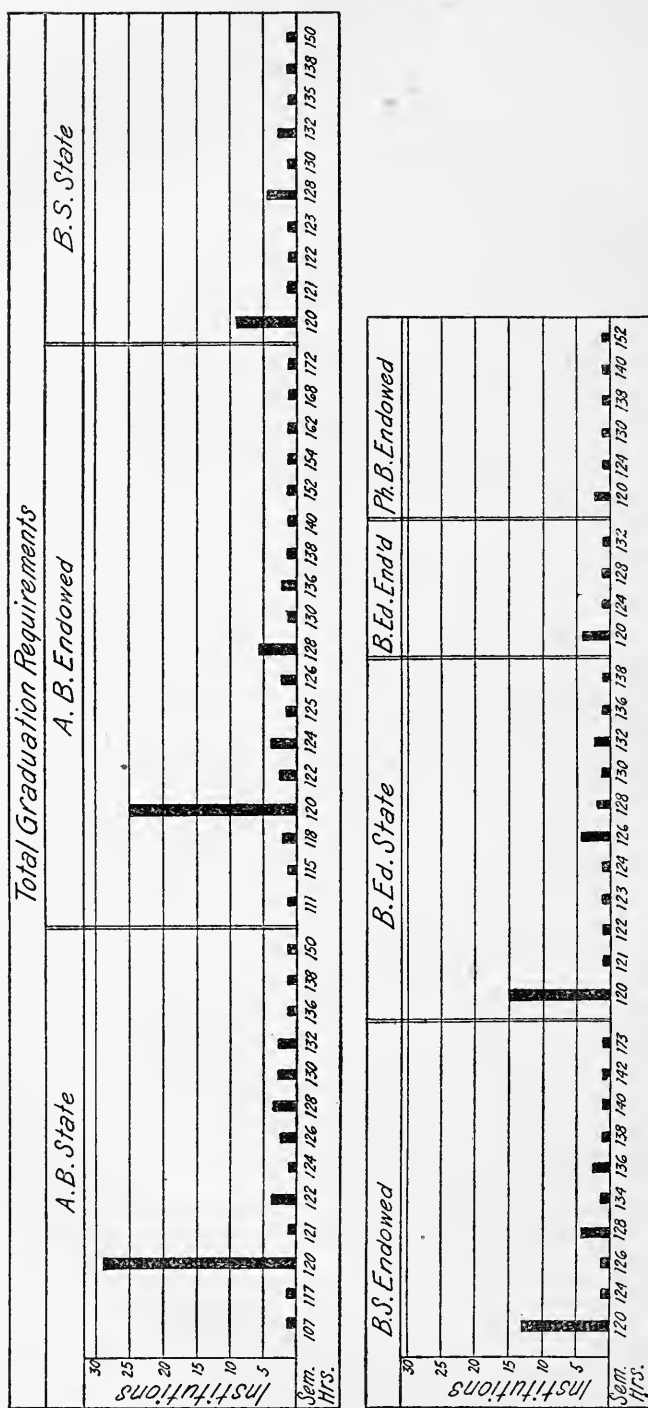
*Summary of frequencies—total requirements.*

## A. B. (STATE).

1 requires 107 semester hours.  
 1 requires 117 semester hours.  
 28 require 120 semester hours.  
 1 requires 121 semester hours.  
 3 require 122 semester hours.  
 1 requires 124 semester hours.  
 2 require 126 semester hours.  
 3 require 128 semester hours.  
 2 require 130 semester hours.  
 2 require 132 semester hours.  
 1 requires 136 semester hours.  
 1 requires 138 semester hours.  
 1 requires 150 semester hours.

## A. B. (ENDOWED).

1 requires 111 semester hours.  
 1 requires 115 semester hours.  
 2 require 118 semester hours.  
 25 require 120 semester hours.  
 2 require 122 semester hours.  
 3 require 124 semester hours.  
 1 requires 125 semester hours.  
 2 require 126 semester hours.  
 6 require 128 semester hours.  
 1 requires 130 semester hours.  
 2 require 136 semester hours.  
 1 requires 138 semester hours.  
 1 requires 140 semester hours.  
 1 requires 152, 154, 162, 168, 172 semester hours.



GRAPH 19.



*Summary of frequencies—total requirements—Continued.*

## B. S. (STATE).

9 require 120 semester hours.  
 1 requires 121 semester hours.  
 1 requires 122 semester hours.  
 1 requires 123 semester hours.  
 4 require 128 semester hours.  
 1 requires 130 semester hours.  
 2 require 132 semester hours.  
 1 requires 135 semester hours.  
 1 requires 138 semester hours.  
 1 requires 150 semester hours.

## B. ED. (STATE).

15 require 120 semester hours.  
 1 requires 121 semester hours.  
 1 requires 122 semester hours.  
 1 requires 123 semester hours.  
 1 requires 124 semester hours.  
 4 require 126 semester hours.  
 2 require 128 semester hours.  
 1 requires 130 semester hours.  
 2 require 132 semester hours.  
 1 requires 136 semester hours.  
 1 requires 138 semester hours.

## PH. B. (STATE).

1 requires 126 semester hours.

## LITT. B. (STATE).

1 requires 132 semester hours.

## B. S. (ENDOWED).

13 require 120 semester hours.  
 1 requires 124 semester hours.  
 1 requires 126 semester hours.  
 4 require 128 semester hours.  
 1 requires 134 semester hours.  
 2 require 136 semester hours.  
 1 requires 138 semester hours.  
 1 requires 140 semester hours.  
 1 requires 142 semester hours.  
 1 requires 173 semester hours.

## B. ED. (ENDOWED).

3 require 120 semester hours.  
 1 requires 124 semester hours.  
 1 requires 128 semester hours.  
 1 requires 132 semester hours.

## PH. B. (ENDOWED).

2 cases of 120 semester hours.  
 1 case each of 124, 130, 138, 140, and 152 semester hours.

## LITT. B. (ENDOWED).

1 requires 126 semester hours.

**THE ELECTIVES OF COLLEGE GRADUATION REQUIREMENTS.****TYPES OF ELECTIVES.**

The hundreds of subjects that are available for election in most universities and colleges may be organized and classified as follows:

(a) Semielectives, or restricted electives, those chosen from a limited number of subjects under definite restrictions.

(b) Group electives, or degree electives, those which are specifically limited to definite general group subjects.

(c) The major, or the major and minor electives.

(d) The freshman, or sophomore, or junior, or senior electives.

(e) Advised electives.

(f) The free electives.

This classification is more extensive than that of the elective system of the entrance requirements. The larger numbers of subjects included in the different curricula and the need of means of adminis-

tering the curricula in a coherent and yet well-distributed manner are responsible for the different methods of control that have been established.

Personal needs, professional specialization, and departmental requirements are served through the different types of elective control.

*The semielectives (or restricted electives).*—The subjects listed as the semielectives of the entrance requirements seldom exceed three or four subjects. In the college curricula the semielective has a wider distribution. The method of restriction is also variable. In the following lists the semielectives of the different colleges are given:

#### SEMIELECTIVES.

##### A. SEMIELECTIVES WITH ONE SUBJECT TO BE CHOSEN.

###### *State schools.*

1. *Arizona*, A. B. and B. S. Select one subject to the extent of 8 semester hours from Group IV. (History and archeology, social science, philosophy and psychology, education, law, history of art, history of music).

2. *Idaho*, A. B. Choose one of the following: Mathematics, 8,<sup>1</sup> 8;<sup>2</sup> science,<sup>1</sup> 8;<sup>2</sup> language, 10 or 8,<sup>1</sup> or 8 or 10.<sup>2</sup>

3. *Kentucky*, A. B. Select one of mathematics, or chemistry, or physics to the extent of 10 or 11 semester hours.

4. *Rutgers, N. J.*, A. B. Select either 1 semester hour from Bible or English composition.

5. *Nevada*, A. B. Select social science or mathematics to the extent of 6 semester hours.

6. *North Carolina*, A. B. Group I. Mathematics or chemistry or physics, 6 semester hours. Group II. Mathematics or physics, 6 semester hours. Group III. Mathematics, or German, 6 semester hours.

7. *Ohio State University*, A. B. Select mathematics, philosophy, or psychology to the extent of 6 semester hours.

8. *Ohio University*, A. B. The same as for the Ohio State University.

9. *Miami (Ohio)*, A. B. Select mathematics, Greek, or Latin to the extent of at least 8 semester hours.

10. *New Mexico*, B. Ped. Select chemistry, mathematics, or physics, 6 semester hours.

11. *Tennessee*, A. B. Select either history or psychology to the extent of 6 semester hours.

12. *Texas*, A. B. and B. Ed. Select at least one-third of a course in either philosophy or psychology.

13. *Utah*, A. B. Select one of social science, philosophy, economics, sociology, psychology, ethics, or education to the extent of 6 semester hours.

14. *Vermont*, A. B. Select from psychology, logic, or ethics to the extent of 6 semester hours.

Ph. B. Select from modern language, or science to the extent of 8 semester hours, or from psychology, logic, or ethics to the extent of 6 semester hours.

15. *Washington State College*, A. B. Select from history, economics, English, education, or foreign language 5 semester hours.

<sup>1</sup> Freshman year.

<sup>2</sup> Sophomore year.

16. *Wyoming*, B. Ed. Three semester hours in history of education may be added to the required work.

*Endowed schools.*

1. *Amherst*, A. B. History or philosophy 1 year.
  2. *Brown University*, Ph. B. Mathematics in freshman year 6 semester hours, or classical civilization and argumentation 12 semester hours. (Sophomore year.)
  3. *Bryn Mawr*, A. B. Choose one subject to the extent of 10 semester hours from science, or history, or economics, and politics, or philosophy, or psychology, or mathematics.
  4. *Catholic University*, A. B. School of Letters—Modern language group. Select one from German, French, Spanish, Celtic, or English, 6 semester hours.
  5. *Northwestern*, A. B. and B. S. Choose one subject to the extent of 6 semester hours from economics, history, philosophy, political science, or psychology.
  6. *Oberlin*, A. B. Choose one subject to the extent of the 6 semester hours from mathematics or astronomy, or physics or chemistry.
- NOTE.—If mathematics was chosen in freshman year, elect any science. If a science was chosen in place of mathematics, select a science from Group V (geology, botany, and zoology).
7. *Swarthmore*, A. B. Select one subject to the extent of 6 semester hours from history, philosophy, economics, physical science, psychology, and education.
  8. *Union*, A. B. and Ph. B. Select one subject to the extent of 6 semester hours from mathematics, or biology and geology.
  9. *Wellesley*, A. B. Select a language (unless a third language has been presented for admission) or natural science (if not prescribed for admission) to the extent of 6 semester hours or 12 semester hours.

B. SEMIELECTIVES WITH TWO SUBJECTS TO BE CHOSEN.

*State schools.*

1. *Colorado*, A. B. Classics, mathematics, or science, 15 semester hours; psychology or philosophy, 5 semester hours.
2. *Montana*, A. B. Choose either history or economics, 6 to 10 semester hours, Choose sophomore English or 2 courses in philosophy, 6 to 10 semester hours.
3. *New Mexico*, A. B. One course in either chemistry, mathematics, or physics; and one course in either biology, geology, or psychology, total, 12 semester hours.
4. *Cornell*, N. Y. A. B. English and history or English or history, 6 semester hours; and philosophy; psychology and mathematics, 6 semester hours.
5. *North Dakota*, A. B. Social science or mathematics, 8 semester hours; biblical literature or history, 4 semester hours.
6. *Oklahoma*, A. B. and B. Educ. One ancient language, one modern language, mathematics, 8 semester hours each in two subjects.
7. *West Virginia*, A. B. Physics, chemistry, or mathematics, 8 semester hours, public speaking, education or philosophy, 8 semester hours.
8. *Wisconsin*, A. B. Select two from natural science, mathematics, or history—total, 12 or 16 semester hours.

*Endowed Schools.*

1. *Bowdoin*, A. B. Greek or Latin or mathematics, 2-year courses; also an elective from the same subjects or from French, German, government, history, or physics, 2-year courses.
2. *Carleton*, B. S. Two of the following, to the extent of 12 semester hours, biology, chemistry, mathematics, or physics.
3. *De Pauw*, A. B. Science or mathematics, 10 semester hours, and social science, philosophy, education, etc., 18 semester hours.

4. *Johns Hopkins*, A. B. During the first year of residence all students take two of the following from 2 to 4 semester hours: Latin, Greek, mathematics, or physics.

5. *Lafayette*, B. S. One from French, German, or Spanish, biology or elementary chemistry, 6 to 8 semester hours. One from history, biology, or organic chemistry, and qualitative analysis, 3 semester hours.

6. *Princeton*, Sc. B., Litt. B. Two of Latin, mathematics, physics (second course), or chemistry (first course), 12 semester hours.

7. *Tulane*, A. B. (literary). Select two from history, economics, philosophy, logic, or psychology, 12 semester hours.

#### C. SEMIELECTIVES WITH THREE OR MORE SUBJECTS TO BE CHOSEN.

##### *State Schools.*

1. *William and Mary*, A. B. Select three subjects from language, literature, history, political science, philosophy, and mathematics to the extent of 20 semester hours.

B. S. Select from the higher group subjects in chemistry, physics, and biology to the extent of 20 semester hours.

2. *Pennsylvania State College*, A. B. One from mathematics or Greek, 10 semester hours;<sup>1</sup> one from mathematics or psychology, 3 semester hours;<sup>2</sup> one from science or Greek, 3 semester hours;<sup>2</sup> one from philosophy or Greek, 3 semester hours.<sup>2</sup>

3. *South Dakota*, A. B. Select from group 2 (mathematics and natural sciences, 6<sup>1</sup> 6<sup>2</sup>); also select from group 3 (social science, philosophy, education, ethics, history, and sociology, 6<sup>1</sup> 6<sup>2</sup>).

#### D. SEMIELECTIVES WITH THREE SUBJECTS TO BE CHOSEN.

##### *Endowed Schools.*

1. *Haverford*, A. B. One from chemistry, physics, engineering, government, and history, 6 to 8 semester hours. Two from language, science, mathematics, engineering, biblical literature, and social work, 16 semester hours.

2. *Pennsylvania*, A. B. One from mathematics, physics, or chemistry, 6 semester hours in one, or 3 semester hours each in two. One from zoology, botany, or psychology, 6 semester hours in one, or 3 semester hours each in two. One from history, economics, or philosophy, 6 semester hours in one, or 3 semester hours each in two.

3. *Trinity*, A. B. One from history, biology, chemistry, or physics, 6 semester hours. One from Greek, Latin, or mathematics, history, biology, or chemistry, 12 or 18 semester hours. One from physics, French, or German, 12 or 6 semester hours.

4. *Western Reserve*, A. B. Choose three of the following: Chemistry, modern language, ancient language, and ancient history—total, 18 semester hours.

NOTE.—“In special cases the choice of two ancient and two modern foreign languages is permitted. If two foreign languages are chosen, one of them must be a language presented for admission for college.”

#### THE GROUP SYSTEM AND THE COLLEGE CURRICULUM.

The majority of the colleges under discussion organize their curricula into group systems. Twelve of the 50 State schools and 11 of the 50 endowed schools have specific group systems—namely, Indiana, Montana, Nevada, Oregon, Pennsylvania State College, Porto Rico, Tennessee, Utah, State College of Washington, West Virginia, Wisconsin, and Wyoming, also Amherst, Bowdoin, Colorado, Haverford, Leland Stanford, Northwestern, Oberlin, Tufts, Vassar, Washington (St. Louis), and Wellesley.

<sup>1</sup> Freshman year.

<sup>2</sup> Sophomore year.

There are four distinct types of group systems in use in the colleges under discussion, but there is little uniformity to be found in the details of these groups, even when the groups are of the same general type.

#### TYPES OF GROUPS.

1. *The departmental group.*—The department is the basis of the group, the total number of groups being approximately the number of departments, or in some cases related departments.

2. *The general group.*—This group is formed by dividing the curriculum into three or four general groups each of which is composed of one or more departmental groups.

3. *The degree course groups.*—These are prescribed groups leading to one degree.

4. *The freshman, sophomore, junior, and senior groups.*—These are elective groups which are required or available in either the freshman, or sophomore, or the junior, or senior years.

5. *Groups of a special type.*—See the University of Colorado, and the Colleges of William and Mary, Bryn Mawr, and Williams.

#### THE FUNCTIONS OF THE GROUP SYSTEM.

In addition to forming the basis of a general organization of the curriculum, the group system functions in the following ways:

1. It may be the basis of the major and minor subjects. (See the University of Missouri.)

2. It may be the basis of semielectives. (See Smith College.)

3. It may be the basis of distribution or concentration, or both. This is true for nearly all of the group systems. (See Distribution of prescribed college subjects, p. 177; and Distribution and concentration, etc., p. 180.)

#### *Institutions with departmental groups.*

Number of groups.	Institutions.
6.....	Missouri, Swarthmore.
7.....	Arizona.
8.....	Smith.
9.....	Baker, North Dakota.
11.....	Kansas.
12.....	Cornell.
16.....	Miami.
21.....	Mississippi.

#### *Institutions with general groups.*

Number of groups.	Institutions.
2.....	Delaware, Washington. (2)
3.....	Hawaii, Iowa, Louisiana, Michigan, Minnesota, Nebraska, New Hampshire, New Mexico, North Carolina, Oklahoma, South Carolina, South Dakota, Vermont, Carleton, Colgate, Hamilton, Harvard, Lafayette, New York, Princeton, Washington and Lee, Wells, Wesleyan, Western Reserve, Williams, Yale. (25)
4.....	Arkansas, Florida, Ohio State, Ohio, Chicago, De Pauw, Earlham, Pittsburgh. (9)
5.....	Maine.
6.....	Columbia, Virginia, Pennsylvania. (3)
7.....	Columbia, School of Practical Arts.

## EXAMPLE OF INSTITUTION USING SYSTEM OF GENERAL GROUPS.

## HARVARD COLLEGE.

## RULES FOR THE CHOICE OF ELECTIVE STUDIES.

(For the class of 1920, the class of 1921, and previous classes.)

I. Every student is required to select his courses under the guidance of an adviser associated with a standing committee of nine, the committee on the choice of electives, of which the president is chairman. At or before the beginning of the freshman year he must meet his adviser to discuss the studies of the first year. At the end of his first year in college he is required to present to his adviser a plan of study for the remainder of his college course; this plan must conform to the general principles laid down in the following rules.

II. Every student shall take at least six of his courses in some one department, or in one of the recognized fields for distinction. In the latter case four must be in one department. Only two of the six may be courses open to freshmen or distinctly elementary in character.

III. For purposes of distribution all the courses open to undergraduates shall be divided among the following four general groups. Every student shall distribute at least six of his courses among the three general groups in which his chief work does not lie, and he shall take in each group not less than three in any two groups.

The groups are:

1. Language, literature, fine arts, music. *Departments:* Semitic languages and history, Indic philology, the classics, English, Germanic languages and literatures, French and other romance languages and literatures, comparative literature, the fine arts, music; also courses in Slavic languages.

2. Natural sciences. *Departments:* Physics, chemistry, engineering sciences, botany, zoology, geology and geography, mineralogy and petrography; also courses in astronomy, in hygiene and sanitation, and in the history of science.

3. History, political and social sciences. *Departments:* History, government, economics, education, anthropology.

4. Philosophy and mathematics. *Departments:* Philosophy and psychology, social ethics, mathematics; also certain philosophical courses outside of the department of philosophy and psychology.

IV. Prescribed work shall not count either for concentration or distribution.

V. A student may not count a course both for concentration and distribution.

VI. In administering these rules the committee, in accordance with the instructions of the faculty, makes exceptions freely in the case of earnest students who desire to change at a later time the plans made in their freshman year, and liberal allowances for earnest students who show that their courses are well distributed, even though they may not conform exactly to the rules laid down for distribution. In making exceptions to the rules, a student's previous training and outside reading are taken into account.

(For the class of 1922 and subsequent classes.)

II. Concentration. Every student shall take at least six courses in one of the recognized fields of distinction. At least four courses must be in one department. The other two may be either in that department or in related subjects approved by the committee. Only two of the six may be courses regularly open to freshmen or distinctly elementary in character. Except in the natural sciences and in mathematics, every student must at the close of his college course take an examination on his field of concentration. Until he passes this examination he will not be recommended for his degree.

III. Distribution. Every student shall take for distribution four courses to be selected as follows: A course in literature, a course in history, a course in science, and a course in mathematics or philosophy. If a course in any of these subjects is included in his field of concentration, the student must substitute for it any course outside of his field of concentration.

IV. Military science will not count as a field for concentration. Students taking the whole military science programme will thereby satisfy the rules for distribution.

V. Prescribed work (English A, English D, German A, French A) shall not count for either concentration or distribution.

VI. A student may not count a course both for concentration and distribution

#### SCHOOLS WITH ELECTIVE DEGREE GROUPS.

This list does not include those schools which prescribe one or more special degree courses unless there are for each degree two or more prescribed groups. Johns Hopkins, which is credited as being the founder of the group system, has prepared 10 definite schedules leading to the A. B. degree each of which is in practical harmony with the general plan of study. These groups are listed as Illustrative Combinations outlining "certain combinations of courses which satisfy the requirements for the degree of bachelor of arts and which have been approved by the Board of Collegiate Studies. Other combinations are of course possible." In each case the major subject is given its place in the course. The combinations outlined are: A. Latin or Greek being the major; B. English being the major; C. French, Spanish or Italian being the major; D. German being the major; E. History being the major; F. Political economy being the major; G. Mathematics or physics being the major; H. Biology being the major; I. Chemistry being the major; J. Geology being the major.

Two complete combinations are here given:

#### *A. Latin or Greek being the major.*

##### First year:

English composition 1.  
French or German elements.  
Latin 1.  
Greek 1.  
Physical exercise.

##### Second year:

German or French elements.  
English literature.  
Latin 2.  
Greek 2.  
History 1.  
Public speaking.

##### Third year:

Latin 3.  
Greek 3.  
Philosophy.  
Science and laboratory.  
Elective.

##### Fourth year:

Latin 4.  
Greek 4.  
Comparative philology.  
Two electives.

*E. History being the major.*

## First Year:

English composition 1.  
 French 1 or German 1.  
 Latin 1 (advised).  
 Mathematics 1 or  
 Physics 1.  
 Physical exercise.

## Second Year:

English literature.  
 History 1.  
 German 1 or French 1.  
 Political economy 1.  
 Elective.  
 Public speaking.

## Third Year:

History 2 or 3.  
 Philosophy.  
 Political economy 2.  
 One science elective.  
 One elective.

## Fourth Year:

History 3 or 2 (advised).  
 History 4.  
 Political science 1.  
 Two electives.

In Group A the amount prescribed in ancient and modern language is about 60 semester hours, or 50 per cent of the entire course. In Group E about 42 semester hours, or 35 per cent, is required in history and political science.

The George Washington University has 5 general groups leading to the cultural A. B. degree. In Group I, Latin, 25 per cent of the entire course, or 30 semester hours, are required in foreign language, but 12 semester hours of these must be in Latin.

In Group II, modern language, 20 per cent of the entire course, or 24 semester hours, are required in modern language.

In Group III, natural science, 15 per cent of the entire course, or 18 semester hours, are prescribed in science.

In Group IV, political and social sciences, 25 per cent of the entire course, or 30 semester hours, are required in social science.

The fifth group is premedical, with 50 per cent prescribed in science.

The University of California has 2 plans leading to the cultural A. B. degree. Plan A has 10.25 per cent, or 12 semester hours, in language, while in Plan B the same amount is required in science.

The University of North Carolina has three groups leading to the cultural A. B. degree. In Group I, 23 per cent is prescribed in ancient language; in Group II, 22 per cent in ancient and modern language; in Group III, 10 per cent is required in science.

The Catholic University characterizes the different groups of the School of Letters as follows:

1. Classical, 54 semester hours ancient language (35.5 per cent of total).

2. Latin-historical, 48 semester hours language, 24 semester hours social science (47 per cent of total).

3. Modern language, 42 semester hours (25.58 per cent of total).

A comparison of the per cent of credit required in the typical subjects just given with the percentages of credit required in the



major subjects as shown in Table 39, page 133, makes it clear that there are no essential differences in the amounts prescribed, the principle of concentration being served in both cases.

A study of the groups given above shows that they are carrying on the functions of many of the different degree courses, such as the B. S., B. L., Ph. B. In a previous section attention was called to the fact that from 20 to 30 years ago the tendency was to grant several cultural bachelor's degrees.

The tendency on the part of colleges, today, is to grant but one cultural degree, the A. B., the approach to this degree being made by one or more prescribed groups.

#### SCHOOLS WITH YEAR GROUPS (FRESHMAN, SOPHOMORE, ETC.).

The University of Georgia has junior and senior elective groups from which courses are chosen in sequence to the extent of one-half of the college course.

The Idaho State University has prescribed freshman and sophomore groups, the junior and senior years being open to free electives.

The University of Nevada has a special list of electives, which is open to freshman and sophomores.

Beloit College has two general groups; that of the sophomore year with three subgroups, and that of the junior and senior years with three subgroups. These are related with respect to sequence and distribution.

#### SCHOOLS WITH ELECTIVE GROUPS OF A SPECIAL TYPE.

The following schools, the University of Colorado, the Colleges of William and Mary, Bryn Mawr, and Williams, have developed well-organized group systems which are worthy of special mention.

The system in vogue at Colorado State University is based on four general divisions: Letters, sciences, philosophy, history and economics. Under each of these divisions are grouped from 6 to 14 majors and their corresponding minors, as follows. (Single example only, under each division is given.)

##### *Division of Letters:*

Group (a) *major*, Latin; *minors*  $\begin{cases} \text{Greek.} \\ \text{European history.} \end{cases}$

##### *Division of Sciences:*

Group (g) *major*, mathematics; *minors*  $\begin{cases} \text{Physics.} \\ \text{Astronomy.} \end{cases}$

##### *Division of Philosophy:*

Group (n) *major*, philosophy; *minors*  $\begin{cases} \text{Psychology.} \\ \text{Biology.} \end{cases}$

##### *Division of History and Economics:*

Group (q) *major*, history; *minors*  $\begin{cases} \text{Economics.} \\ \text{Sociology.} \end{cases}$

At least 50 hours must be taken in some scheduled group, including at least 5 hours in each minor; thus emphasizing concentration as well as some degree of distribution.

Bryn Mawr lists 63 definite major course groups. Groups 1 to 20 being the possible combinations of any language with any language; group 22 is ancient history with Greek; group 23 is ancient history with Latin; and so on. Here as in the University of Colorado the majors are definitely outlined and ready to be combined with the prescribed courses.

The group system of the College of William and Mary is unique in that there are two general groups, the first or lower group comprising to a great extent the introductory courses such as are usually numbered 1 and 2. The upper group comprises all courses not in the lower group.

The basis of the Williams College group system is the 5 groups of the entrance requirements; this enables a more perfect articulation of courses to be made by those students whose work is not of the usual type. The relationships of the different courses are worked out to the smallest detail, as is shown in the accompanying chart.

#### REQUIREMENTS FOR ADMISSION.

Candidates for admission to the freshman class must present satisfactory qualifications in one of the following groups of subjects, the work covered by the subjects being given in detail in the pages following. Students admitted in any of the five admission groups are candidates for the degree of bachelor of arts.

The notation used agrees with that of the College Entrance Examination Board.

Admission Group I.	Admission Group II.	Admission Group III.	Admission Group IV.	Admission Group V.
English 1 and 2. Greek A, B, C, and G. History A. Latin 1, 2, 4, and 5. Mathematics A and C. An elective.	English 1 and 2. French A and B. <sup>1</sup> History A. Latin 1, 2, 4, and 5. Mathematics A and C. An elective.	English 1 and 2. German A and B. <sup>1</sup> History A. Latin 1, 2, 4, and 5. Mathematics A and C. An elective.	English 1 and 2. French A. History A. Latin 1, 2, 4, and 5. Mathematics A, B, C, D, and F. An elective.	English 1 and 2. German A. History A. Latin 1, 2, 4, and 5. Mathematics A, B, C, D, and F. An elective.

<sup>1</sup> The passing of French B does not entitle to credit in French A. Both French A and French B must be passed.

#### EXHIBIT OF FRESHMAN STUDIES.

The following exhibit of studies indicates the courses of instruction that are offered to freshmen. The studies of the freshman year are prescribed, except that there is an option between French and German for students in Admission Group I.

The amounts of French and German which students entering by the various admission groups must have completed before graduation are as follows: Admission Group I, French 1-2, or German 1-2; Admission Group II, French 1-2, 3-4, and 5-6 and German 1-2; Admission Group III, French 1-2 and German 1-2, 3-4, and 5-6; Admission Group IV, French 1-2 and 3-4 and German 1-2; Admission Group V, French 1-2 and German 1-2 and 3-4.

The admission groups are arranged according to the different terms of admission stated on pages 28 and 29 of the catalogue. The uninclosed figures refer to the courses of instruction as announced by the departments in the catalogue and the figures in parentheses indicate the number of exercises per week in each course.

## FRESHMAN YEAR—REQUIRED COURSES.

Admission Group I.	Admission Group II.	Admission Group III.	Admission Group IV.	Admission Group V.
French 1-2 or } (3) German 1-2 } Greek 1-2 (4) Latin 1-2 (3) Mathematics 1-2 (4) Rhetoric 1-2 (2) <hr/> 16	French 5-6 (4) German 1-2 (3) Latin 1-2 (3) Mathematics 1-2 (4) Rhetoric 1-2 (2) <hr/> 16	French 1-2 (3) German 5-6 (4) Latin 1-2 (3) Mathematics 1-2 (4) Rhetoric 1-2 (2) <hr/> 16	French 3-4 (3) German 1-2 (3) Latin 1-2 (3) Mathematics 3-4 (4) Rhetoric 1-2 (2) <hr/> 15	French 1-2 (3) German 3-4 (3) Latin 1-2 (3) Mathematics 3-4 (4) Rhetoric 1-2 (2) <hr/> 15
Hygiene and phys- ical training. Public speaking.	Hygiene and phys- ical training. Public speaking.	Hygiene and phys- ical training. Public speaking.	Hygiene and phys- ical training. Public speaking.	Hygiene and phys- ical training. Public speaking.

## EXHIBIT OF DIVISIONS AND GROUPS.

Odd numbers refer to the first semester, even numbers to the second semester. Year courses have their two semester numerals joined by a hyphen.

Major groups.	Freshman courses.	Sophomore courses.	Junior groups.	Senior electives.
GREEK.....	Greek 1-2.	Greek 3-4.	a. Greek 5-6. b. Latin 3-4. c. Greek 11- History 12. a. Latin 5-6. b. Greek 3-4. c. Greek 11- History 12.	Greek 7. Greek 8. Greek 9. Greek 10. Latin 5-6. Latin 7. Latin 8. Greek 8. Greek 9. Greek 10.
LATIN.....	Latin 1-2.	Latin 3-4.	a. French 1-2 or Spanish 1-2. c. History 1-2. (History 5-6). a. German. <sup>1</sup> b. Literature 9-10. c. History 1-2. (History 5-6).	French. <sup>1</sup> Italian 1-2. Italian 3-4. Spanish 1-2. Spanish 3-4. German. <sup>1</sup> German. <sup>1</sup>
FRENCH.....	French. <sup>1</sup>	French. <sup>1</sup>	a. Literature 3-4. b. Literature 5-6. c. Rhetoric 5-6.	Literature 12. Literature 13. Rhetoric 7. Economics 6. Economics 8. Government 3. Government 4. Government 5. Government 6. Government 7. Government 8. Government 9. Art 3. Art 4.
GERMAN.....	German. <sup>1</sup>	German. <sup>1</sup>	a. History 3-4. b. Economic 1-2. c. Government 1-2.	Literature 14. Literature 8. Literature 9-10. Literature 11. History 5-6. History 7. History 8. History 10. History 11. History 12. Economics 3. Economics 4. Economics 5. Philosophy 7. Philosophy 8.
ENGLISH.....	Rhetoric 1-2.	Rhetoric 3- Literature 2.	a. Philosophy 1-2. b. Religion 1-2. c. Art 1-2 <sup>2</sup> Oratory 1-2.	
HISTORY.....		History 1-2.		
PHILOSOPHY.....				
SPECIAL SUBJECT.....	ORATORY.	Rhetoric 3- Literature 2.		

MATHEMATICS.....	Mathematics 1-2.	Mathematics 3-4.	a. Mathematics 5-6. b. Mathematics 7-8 c. Physics 1-2.	Mathematics 9. Mathematics 10. Physics 3-4. Physics 5-6. Physics 7. Chemistry 3-4. Chemistry 5. Chemistry 6. Chemistry 7. Chemistry 8. Chemistry 10.	Physics 5-6. Physics 7. Physics 8. Chemistry 3-4. Chemistry 5. Chemistry 6. Chemistry 7. Chemistry 8. Chemistry 10.
PHYSICS.....	Physics 1-2.	Physics 1-2.	a. Physics 3-4. b. Mathematics 3-4. c. Chemistry 1-2.	Physics 3. Chemistry 6. Chemistry 7. Chemistry 8. Chemistry 10. Physics 3-4. Biology 7-8. Biology 9. Physiology 1. Physiology 2. Astronomy 3.	Physics 5-6. Physics 7. Physics 8. Geology 3. Geology 4. Geology 3. Geology 4. Astronomy 4.
CHEMISTRY.....	Chemistry 1- Chemistry 2.	Chemistry 1- Chemistry 2.	a. Chemistry 3-4. b. Physics 1-2. c. Geology 1-2.	Chemistry 3. Chemistry 6. Chemistry 7. Chemistry 8. Chemistry 10. Physics 3-4. Biology 7-8. Biology 9. Physiology 1. Physiology 2. Astronomy 3.	Physics 5-6. Physics 7. Physics 8. Geology 3. Geology 4. Geology 3. Geology 4. Astronomy 4.
BIOLOGY.....	Chemistry 1- Biology 2.	Chemistry 1- Biology 2.	a. Biology 3-4. b. Biology 5-6. c. Geology 1-2.	Chemistry 3. Chemistry 6. Chemistry 7. Chemistry 8. Chemistry 10. Physics 3-4. Biology 7-8. Biology 9. Physiology 1. Physiology 2. Astronomy 3.	Physics 5-6. Physics 7. Physics 8. Geology 3. Geology 4. Geology 3. Geology 4. Astronomy 4.
SPECIAL SUBJECT.....	ASTRONOMY.	Physics 1-2.	Astronomy 1-2.		

<sup>1</sup> The modern language courses of freshman year in the French and German groups will be determined by the admission record of the student. The modern language courses after freshman year will follow in sequence. See announcements of the departments of German and Romance languages.

<sup>2</sup> History 1-2 is to be taken instead of art 1-2, unless the former has already been completed.



TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR OF ARTS—Continued.

## THREE SUBJECTS—continued.

*Endowed.*

1	Colgate.....	E	L		S								
2	Washington (St. Louis).....	E	L		S								
3	Dartmouth.....	E	L			M							X
4	Earlham.....	E	L			M							
5	Williams.....	E	L			M							
6	Western Reserve.....	E				M		B					X

## FOUR SUBJECTS.

*State.*

1	Ohio State.....	E	L	H	S								
2	Ohio (Athens).....	E	L		S								
3	Oklahoma.....	E	L	H	S								X
4	Washington State College.....	E	L	H	S								
5	West Virginia.....	E	L	H	S								X
6	Florida.....	E	L	H		M							X
7	North Carolina, historical group.....	E	L	H		M							
8	Kansas.....	E	L		S	M							
9	Utah.....	E	L		S	M							X
10	Vermont.....	E	L			M	O						
11	North Dakota.....	E	L		S			F					X

*Endowed.*

1	Tulane, classical course.....	E	L	H		M							
2	Amherst.....	E	L		S	M							
3	Baker.....	E	L			M							
4	Northwestern.....	E	L		S	M							
5	Tufts.....	E	L			M							X
6	Tulane, literary course.....	E	L		S	M							
7	Bryn Mawr.....	E	L				P						
8	Beloit.....	E	L		S			B					X
9	Trinity.....	E	L			M							
10	Washington and Lee.....	E	L			M		B	Hy				
11	Wesleyan.....	E	L						Hy	O			
12	Carleton.....	E	L			M	P						X

## FIVE SUBJECTS.

*State.*

1	Alabama.....	E	L	H	S	M							
2	California, Group A.....	E	L	H	S	M							
3	Delaware.....	E	L	H	S	M							
4	Georgia.....	E	L	H	S	M							X
5	Louisiana.....	E	L	H	S	M							
6	Missouri.....	E	L	H	S	M							X
7	North Carolina, scientific course.....	E	L	H	S	M							
8	South Carolina.....	E	L	H	S	M							
9	Texas.....	E	L	H	S	M							
10	Kentucky.....	E	L	H	S		P						
11	Miami, Ohio.....	E	L	H	S		P						X
12	Idaho.....	E	L	H	S			F					

*Endowed.*

1	Union.....	E	L	H	S	M							
2	George Washington, modern language group.....	E	L	H	S		P						
3	George Washington, Latin group.....	E	L	H		M	P						
4	George Washington, political science and social science groups.....	E	L	H		M	P						
5	Princeton.....	E	L		S	M	P						X
6	Swarthmore.....	E	L		S	M		B					

TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR OF ARTS—Continued.

## SIX SUBJECTS.

## State.

1	Illinois.....	E	L	H	S	M	P					
2	Mississippi.....	E	L	H	S	M	P					
3	Virginia.....	E	L	H	S	M	P					
4	William and Mary.....	E	L	H	S	M	P					
5	California, Group B.....	E	L	H	S	M		Hy				×

## Endowed.

1	Brown.....	E	L	H	S	M	P					
2	Colorado.....	E	L	H	S	M	P					×
3	Columbia.....	E	L	H	S	M	P					×
4	George Washington, natural science group.....	E	L	H	S	M	P					
5	George Washington, medical group.....	E	L	H	S	M	P					
6	Grinnell.....	E	L	H	S	M	P					
7	New York.....	E	L	H	S	M	P					×
8	Vanderbilt.....	E	L	H	S	M	P					
9	Vassar.....	E	L	H	S	M	P					
10	Lafayette.....	E	L	H	S	M		B	B			×
11	Goucher.....	E	L	H	S		P	B	B			
12	Oberlin.....	E	L	H	S		P	B	B			×
13	Johns Hopkins.....	E	L	H	S		P		O			
14	Haverford.....	E	L	H		M	P	B	B			
15	Randolph-Macon.....	E	L	H		M	P	B	B			
16	Smith.....	E	L	H			P	B	B	Hy		
17	Hamilton.....	E	L		S	M	P	B	B			
18	Syracuse.....	E	L			M			O	Hy		×
19	Wellesley.....	E			S	M	P	B		Hy		

## SEVEN SUBJECTS.

## State.

1	Washington.....	E	L	H	S	M	P	F				
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## Endowed.

1	Catholic, economic group.....	E	L	H	S	M	P		B <sup>1</sup>			
2	Catholic, science group.....	E	L	H	S	M	P		B <sup>1</sup>			
3	Catholic, classical group.....	E	L	H	S	M	P		B <sup>1</sup>			
4	Catholic, Latin-historical group.....	E	L	H	S	M	P		B <sup>1</sup>			
5	Catholic, modern language group.....	E	L	H	S	M	P		B <sup>1</sup>			
6	Muhlenberg.....	E	L	H	S	M	P		B			
7	South, University of the.....	E	L	H	S	M	P		B			

## EIGHT SUBJECTS.

## State.

1	Rutgers (N. J.).....	E	L	H	S	M	P	B		A		×
2	Pennsylvania State College.....	E	L	H	S		P		Ed	A	Bi	×

## Endowed.

1	Catholic, philosophy group.....	E	L	H	S	M	P	B <sup>1</sup>		Ed		
2	Catholic, medical group.....	E	L	H	S	M	P	B			Dg	

<sup>1</sup> Religion.



TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR OF ARTS—Continued.

## NINE SUBJECTS.

*Endowed.*

1	Wells.....	E	L	H	S	M	P	B	Hy	O	.....
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## BACHELOR OF SCIENCE.

## ONE SUBJECT.

*State.*

1	Michigan.....	E	.....	.....	.....	.....	.....	.....	.....	.....	.....
2	Nebraska.....	E	.....	.....	.....	.....	.....	.....	.....	.....	×
3	New Hampshire.....	E	.....	.....	.....	.....	.....	.....	.....	.....	.....

## TWO SUBJECTS.

*State.*

1	Nevada.....	E	L	.....	.....	.....	.....	.....	.....	.....	×
2	Porto Rico.....	E	L	.....	.....	.....	.....	.....	.....	.....	.....

*Endowed.*

1	Harvard.....	E	L	.....	.....	.....	.....	.....	.....	.....	×
2	Pittsburgh.....	E	L	.....	.....	.....	.....	.....	.....	.....	×
3	Chicago.....	E	.....	S	.....	.....	.....	.....	.....	.....	.....

## THREE SUBJECTS.

*Endowed.*

1	Bowdoin.....	E	L	M	.....	.....	.....	.....	.....	.....	.....
2	Dartmouth.....	E	L	M	.....	.....	.....	.....	.....	.....	.....
3	Earlham.....	E	L	M	.....	.....	.....	.....	.....	.....	.....

## FOUR SUBJECTS.

*State.*

1	Washington State College.....	E	L	H	S	.....	.....	.....	.....	.....	.....
2	Alabama.....	E	L	.....	S	M	.....	.....	.....	.....	.....
3	Arizona.....	E	L	.....	S	M	.....	.....	.....	.....	×
4	Howard (D. C.).....	E	L	.....	S	M	.....	.....	.....	.....	.....
5	Florida.....	E	L	.....	S	M	.....	.....	.....	.....	×
6	Kansas.....	E	L	.....	S	M	.....	.....	.....	.....	.....
7	Virginia, special subject.....	E	L	.....	S	M	.....	.....	.....	.....	.....
8	Hawaii.....	E	L	.....	S	.....	Dg	.....	.....	.....	.....
9	North Dakota.....	E	L	.....	S	.....	.....	F	.....	.....	.....
10	Vermont.....	E	L	.....	.....	M	.....	.....	O	.....	.....

*Endowed.*

1	Colgate.....	E	L	.....	S	M	.....	.....	.....	.....	.....
2	Northwestern.....	E	L	.....	S	M	.....	.....	.....	.....	.....
3	Tufts.....	E	L	.....	S	M	.....	.....	.....	.....	×
4	Beloit.....	E	L	.....	S	.....	B	.....	.....	.....	×
5	Carleton.....	E	L	.....	.....	M	.....	P	.....	.....	.....

TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR OF SCIENCE—Continued.

## FIVE SUBJECTS.

*State.*

1	Delaware.....	E	L	H	S	M								
2	Illinois.....	E	L	H	S	M								X
3	South Carolina.....	E	L	H	S	M								X

*Endowed.*

1	Union.....	E	L	H	S	M								
2	Princeton.....	E	L	H	S	M	P							X
3	Syracuse.....	E	L		S	M		Hy						X
4	Wesleyan.....	E	L			M		Hy	O					

## SIX SUBJECTS.

*State.*

1	Kentucky.....	E	L	H	S	M	P							
2	Mississippi.....	E	L	H	S	M	P							
3	Virginia.....	E	L	H	S	M	P							
4	William and Mary.....	E	L	H	S	M	P							
5	Idaho.....	E	L	H	S	M		F						X

*Endowed.*

1	Columbia.....	E	L	H	S	M	P							X
2	Grinnell.....	E	L	H	S	M	P							
3	New York.....	E	L	H	S	M	P							X
4	Vanderbilt.....	E	L	H	S	M	P							
5	Tulane.....	E	L	H	S	M		Dg						
6	Haverford.....	E	L	H		M	P		B					
7	Randolph-Macon.....	E	L	H		M	P		B					
8	Hamilton.....	E	L		S	M	P		B					
9	Lafayette.....	E	L		S	M		Dg	B					X

## SEVEN SUBJECTS.

*Endowed.*

1	Muhlenberg.....	E	L	H	S	M	P	B						X
2	University of the South.....	E	L	H	S	M	P	B						

## EIGHT SUBJECTS.

*Endowed.*

1	Catholic.....	E	L		S	M	P	B	Dg	Me				
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## NINE SUBJECTS.

*State.*

1	Rutgers (N. J.).....	E	L	H	S	M	P	B	A	Dg				
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TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR'S DEGREE IN EDUCATION—Continued.

## SIX SUBJECTS—continued.

*Endowed.*

1	Tulane.....	E	L	H	S	M	Ed						
2	George Washington.....	E	L	H	S		Ed	P					
3	Columbia (Teachers College).....	E	L	H	S		Ed		Hy				

## SEVEN SUBJECTS.

*State.*

1	Georgia.....	E	L	H	S	M	P	Ed					
2	Mississippi.....	E	L	H	S	M	P	Ed					
3	South Carolina.....	E	L	H	S	M	P	Ed					
4	Vermont.....	E	L		S	M	P	Ed	Dg				

*Endowed.*

1	Pittsburgh (A. B.).....	E	L	H	S		P	Ed	Dg				×
2	Pittsburgh (B. S.).....	E	L	H	S		P	Ed	Dg				×

## BACHELOR OF PHILOSOPHY.

## FOUR SUBJECTS.

*State.*

1	Vermont.....	E	L	M	Dg								
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## ONE SUBJECT.

*Endowed.*

1	Chicago.....	E											
---	--------------	---	--	--	--	--	--	--	--	--	--	--	--

## FIVE SUBJECTS.

*Endowed.*

1	Brown.....	E	L	H	S	P							
2	Union.....	E	L	H	S		M						

## SIX SUBJECTS.

*Endowed.*

1	Lafayette.....	E	L	H	S	M	B						
2	Hamilton.....	E	L		S	M	B	P					

## SEVEN SUBJECTS.

*Endowed.*

1	Muhlenberg.....	E	L	H	S	M	P	B					
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TABLE 49.—*Distribution of college subjects prescribed for the bachelor's degree in State institutions and endowed institutions—Continued.*

## BACHELOR OF PHILOSOPHY—Continued.

## EIGHT SUBJECTS.

*Endowed.*

1	Catholic.....	E	L	H	S	M	P	E	B	.....	.....	.....
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## BACHELOR OF LITERATURE OR OF LETTERS.

## EIGHT SUBJECTS.

*State.*

1	Rutgers.....	E	L	H	S	M	P	A	Dg	.....	.....	.....
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## FIVE SUBJECTS.

*Endowed.*

1	Princeton.....	E	L	S	M	P	.....	.....	.....	.....	.....
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## DISTRIBUTION OF PRESCRIBED COLLEGE SUBJECTS.

The distribution of prescribed subjects in the college is, on the whole, more extensive than for the entrance requirements. Prescribed distribution is made from 5 subjects in the entrance requirements and from 13 subjects in the college requirements, excluding physical training, etc. The greatest number of subjects prescribed by any college is nine and the lowest is one.

## 1. FOR THE A. B. DEGREE.

The following table shows the distribution of college subjects:

STATE.	ENDOWED.
10 require two subjects.	1 requires one subject.
8 require three subjects.	7 require two subjects.
12 require four subjects.	6 require three subjects.
11 require five subjects.	12 require four subjects.
5 require six subjects.	6 require five subjects.
1 requires seven subjects.	19 require six subjects.
2 require eight subjects.	3 require seven subjects.
	1 requires eight subjects.
	1 requires nine subjects.

The mode for the State schools is four subjects; for the endowed, six subjects. In the group prescribing four subjects, the mode (five institutions) is the following combination: English, language, social science, and science. But the largest number of combinations of prescribed subjects is that where five subjects are required, there

being eight institutions which require English, language, history, science, and mathematics.

The subjects are the same for the endowed school group requiring six subjects, the sixth subject being philosophy and psychology. Nine institutions prescribe this particular combination.

The following is the average number of subjects prescribed for the A. B. degree: Average—A. B. (State), 4.6; A. B. (endowed), 5.0. General average, 4.85.

## 2. FOR THE B. S. DEGREE.

STATE.	ENDOWED.
3 require one subject.	0 requires one subject.
2 require two subjects.	3 require two subjects.
9 require four subjects.	3 require three subjects.
4 require five subjects.	5 require four subjects.
5 require six subjects.	4 require five subjects.
1 requires nine subjects.	9 require six subjects.
	2 require seven subjects.
	1 requires eight subjects.

The mode for the State schools is four subjects and the characteristic group—English, language, science, and mathematics; for the endowed schools the mode is six subjects, and the characteristic group—English, language, history, science, mathematics, philosophy and psychology.

The following is the average number of subjects prescribed for the B. S. degree: Average—B. S. (State), 4.10; B. S. (endowed), 5.45. General average, 4.75.

## 3. FOR THE B. ED. DEGREE.

*Bachelor's degree in education.*

STATE.	ENDOWED.
0 requires one subject.	1 requires one subject.
3 require two subjects.	1 requires four subjects.
4 require three subjects.	3 require six subjects.
5 require four subjects.	
8 require five subjects.	
7 require six subjects.	
4 require seven subjects.	

The mode for the B. Ed. degree in the State schools is five subjects, but there is no characteristic group. The largest characteristic group is found in the schools requiring six subjects, the latter being English, language, history and social science, science, mathematics, and education.

The distribution of prescribed subjects for the bachelor's degrees in education show less uniformity as to number and to the subjects required than any other degree comparable.

This lack of uniformity is evident in the schools requiring from three to six subjects, and is shown especially in the following subjects: History and social science, science, mathematics, and philosophy. With respect to the State schools the requirement in English, language, and education is nearly uniform, English and education being prescribed in every curriculum and language in two-thirds of all the curricula. History or social science, science, and philosophy and psychology are required in about one-half of the courses and mathematics in one-third of the courses.

In the endowed schools, mathematics is prescribed by one school only—Tulane, of Louisiana. Philosophy and psychology are required by two schools only—George Washington and Pittsburgh.

Johns Hopkins-Goucher omits education from the list of prescribed studies, but it is provided for in the electives, 24 S. H. being required.

The following is the average number of subjects prescribed for the B. Ed. degree: Average—B. Ed. (State), 4.77; B. Ed. (endowed), 5.43. General average, 4.90.

#### 4. FOR THE PH. B. AND LITT. B. DEGREES.

With the exception of Chicago, the number of prescribed subjects is high, being from four to eight for the Ph. B., and five to eight for the Litt. B. History is not required for the Ph. B. and Litt. B. degrees by Chicago, Rutgers, Hamilton, or Princeton. Science is not required by Rutgers or Chicago. Mathematics is not required by Chicago or Brown; philosophy is omitted by Chicago, Union, and Lafayette. Bible is required by Lafayette, Hamilton, Muhlenberg, and Catholic, but is not required by Vermont, Rutgers, or Princeton for these degrees. Education is required by the Catholic University for the Ph. B. degree, while art and drafting are required for the Ph. B. by Rutgers.

#### *Ph. B. degree.*

STATE.	ENDOWED.
1 institution requires 4 subjects.	1 requires 1 subject. 2 require 5 subjects. 2 require 6 subjects. 1 requires 7 subjects. 1 requires 8 subjects.

The following table gives the average number of prescribed subjects for the Ph. B. and Litt. B. degrees:

Degree.	Average.	General average.
Ph. B. (State).....	(4)	.....
Ph. B. (endowed).....	5.43	5.25
Litt. B. (State).....	(8)	.....
Litt. B. (endowed).....	(5)	6.50

NOTE.—Numbers in parenthesis represent one institution only.

The tendency in the Ph. B. degree is toward a large prescribed list of subjects.

For the Litt. B. degree one institution requires eight subjects while the others require five.

#### THE GENERAL TENDENCY IN DISTRIBUTION.

The general tendency with respect to the distribution of prescribed subjects is to require five or six subjects according to the following comparative table of averages:

Degree.	State.	Endowed.	General average.
A. B.....	4.60	5.00	4.85
B. S.....	4.01	5.46	4.75
B. Ed.....	4.77	5.43	4.90
Ph. B.....	(4.00)	5.43	5.25
Litt. B.....	(8.00)	(5.00)	6.50

With the exception of the Litt. B. degree, there is a tendency to a larger number of prescribed subjects in the endowed schools as compared with those of the State.

#### DISTRIBUTION AND CONCENTRATION OF PRESCRIBED COLLEGE SUBJECTS IN RELATION TO THE SEMIELECTIVES, MAJOR, MAJOR AND MINORS, AND GROUP ELECTIVES.

The analysis of all the semielectives of the institutions on our list shows that the semielectives may count for distribution as well as for concentration.

Ten State and two endowed schools increase distribution by means of one semielective, seven State and one endowed by two semielectives, one endowed by three semielectives, and one State and one endowed by four semielectives.

Three State and four endowed gain either distribution or concentration by means of one semielective, one State and three endowed by two semielectives, and one endowed school by three semielectives.

Three State and two endowed schools increase concentration in the prescribed subjects by means of one semielective, three endowed schools by two semielectives, two endowed schools by three semielectives, and one State school by four semielectives.

The following table shows the frequency of the different distributive combinations. The first column of figures gives the number of prescribed subjects—the fundamental statement of distribution or concentration, the second column of figures gives the number of semielectives required, the third column tells whether the semielective is for distribution, for concentration, or both.



TABLE 50.—*Frequency of the different distributive combinations.*

Institution.	Pre-scribed.	Semielective.	Institution.	Pre-scribed.	Semielective.
Wyoming.....	1	1 D. <sup>1</sup> (B. Ed.)	Rutgers.....	8	1 C.
Nevada.....	2	1 D.	Colorado.....	2	2 D.
New Mexico.....	3	1 D.	Cornell.....	2	2 D.
Tennessee.....	3	1 D.	North Dakota.....	2	2 D.
Amherst.....	4	1 D. <sup>1</sup>	Wisconsin.....	2	2 D.
North Western.....	4	1 D.	Bowdoin.....	2	2 D. <sup>1</sup>
Ohio State.....	4	1 D.	Montana.....	3	2 D.
Ohio.....	4	1 D.	New Mexico.....	3	2 D.
Utah.....	4	1 D.	West Virginia.....	4	2 D. <sup>1</sup>
Vermont.....	4	1 D.	Oklahoma.....	4	2 D or C.
Miami.....	5	1 D.	Carleton.....	4	2 D or C.
Texas.....	5	1 D.	De Pauw.....	4	2 D or C.
Swarthmore.....	5	1 D.	Tulane.....	4	2 D or C.
Arkansas.....	3	1 D or C.	Princeton.....	5	2 C.
Bryn Mawr.....	4	1 D or C.	Johns Hopkins.....	6	2 C. <sup>1</sup>
Idaho.....	5	1 D or C.	Lafayette.....	6	2 C.
Kentucky.....	5	1 D or C.	Western Reserve.....	3	3 D.
Brown.....	6	1 D or C.	Trinity.....	4	3 D or C.
Oberlin.....	6	1 D or C.	William and Mary.....	6	3 C.
Wellesley.....	6	1 D or C.	Haverford.....	6	3 C. <sup>1</sup>
Washington State College.....	4	1 C. <sup>1</sup>	South Dakota.....	2	4 D.
North Carolina.....	5	1 C.	Pennsylvania.....	2	4 D. <sup>1</sup>
Union.....	5	1 C.	Pennsylvania State College.....	8	4 C. <sup>1</sup>
Catholic.....	7	1 C.			

<sup>1</sup> Are somewhat distributive in function.

It is evident that where there is a smaller number of prescribed subjects the semielectives count for distribution; where there is a greater number of prescribed subjects the semielectives count chiefly for concentration. Between these extremes the semielectives count for either distribution or concentration, or both.

#### THE FUNCTION OF THE MAJOR.

The tendency of the major is toward concentration in nearly all instances. This is evident from a study of the major options for the A. B. degree of the following schools: Florida, Delaware, Virginia, Alabama, Arizona, California, Kansas, Nebraska, North Carolina, South Carolina, Princeton, Tulane, Beloit, Swarthmore, Brown, Wesleyan, De Pauw, Oberlin, Harvard, and Leland Stanford; and for the B. Ed. degree, Alabama, Iowa, and Johns Hopkins-Goucher.

The element of distribution appears definitely in combination with concentration in the majors of the following schools: Oregon, Wisconsin, Iowa, Montana, Maine, Utah, Pennsylvania, and Columbia.

#### THE FUNCTION OF THE MAJOR AND MINORS.

The function of the major and minors is obviously for distribution as well as for concentration in all schools, although either characteristic may predominate.

#### THE FUNCTIONS OF THE GROUPS (A. B. AND B. S. DEGREES).

In 15 State and 9 endowed schools the elective group systems are administered either for distribution or concentration; in 9 State and 5 endowed schools the elective groups are primarily for distribution;

in 6 State and 6 endowed schools the primary function of the elective group is for concentration.

### SUMMARY OF CHARACTERISTICS OF COLLEGE GRADUATION REQUIREMENTS FOR THE BACHELOR'S DEGREE.

#### TYPES OF CULTURAL FIRST DEGREES.

Four cultural first degrees are granted by the institutions of our list, the A. B., B. S., Ph. B., and Litt. B. or L. H. B. The schools of education grant a first degree in education, but the nomenclature varies considerably in the different schools.

The A. B. degree is granted by all but two of the 51 State schools and by all of the 50 endowed schools of our list; the B. S. degree by 23 State and 28 endowed schools; the Ph. B. by 1 State and 7 endowed schools; the Litt. B. by 1 State and 1 endowed school; the B. Ed. degree by 31 State and 6 endowed schools.

Both the A. B. and B. S. degrees are given by 21 State and 28 endowed schools; the A. B., B. S., and Ph. B. by 1 State and 6 endowed schools; the A. B., B. S., and Litt. B. by 1 State school and 1 endowed. The A. B., B. S., Ph. B., and L. H. B., by 1 endowed school.

#### VALUE AND NOMENCLATURE OF COLLEGE UNIT OF CREDIT.

Two terms for measuring college credit are in general use, namely: the semester hour and the year hour. The former term is used by 43 State and 29 endowed schools of our list, or by 84.3 per cent, and 58 per cent of the respective totals. With respect to the nomenclature, "semester hour" is used by 28 State and 20 endowed schools. The other names given are "unit," "term-hour," "credit," "hour unit," "credit hour," and "session hour."

All schools using the year hour credit designate it "year hour" with the exception of three endowed schools, two of which use the word "unit," while one uses "point." Other exceptions to the aforementioned terms are "course" and "major."

#### NUMBER OF SEMESTER HOURS REQUIRED FOR THE BACHELOR'S DEGREE (PHYSICAL TRAINING, ETC., EXCLUDED).

The average number of semester hours required for each type of bachelor's degree is as follows:

A. B. (State).....	122.75	B. Ed. (endowed).....	124.00
A. B. (endowed).....	126.62	Ph. B. (State).....	(126.00) <sup>1</sup>
B. S. (State).....	126.18	Ph. B. (endowed).....	132.00
B. S. (endowed).....	124.02	Litt. B. (State).....	(132.00) <sup>1</sup>
B. Ed. (State).....	123.93	Litt. B. (endowed).....	(126.00) <sup>1</sup>

<sup>1</sup> One instance only.

**TIME REQUIRED TO OBTAIN A BACHELOR'S DEGREE.**

The usual time required to obtain a bachelor's degree is 4 years, though in many institutions the time may be shortened to  $3\frac{1}{2}$  or 3 years.

Columbia College limits the time for obtaining an A. B. degree to 6 years.

**CREDIT FOR QUALITY.**

At the time of this writing four State and seven endowed schools recognized "credit for quality" in estimating graduation credits.

**MINIMUM RESIDENCE.**

The tendency is to require at least one year of residence in order to obtain the bachelor's degree. The number of hours may vary from 20 to 36 semester hours as far as published records show. The senior year is required by relatively few schools.

**SUBJECTS PRESCRIBED IN THE COLLEGES OF LIBERAL ARTS.**

The subjects prescribed for the A. B. degree (State) are chosen from a list of 13 subjects; for the A. B. (endowed) from 12; for the B. S. (State) from 8; for the B. S. (endowed) from 12; for the B. Ed. (State), 10; for the B. Ed. (endowed), 10; for the Ph. B. (State), 4; for the Ph. B. (endowed), 9; for the Litt. B. (State), 6; for the Litt. B. (endowed), 5.

The more commonly prescribed college subjects aside from the fundamental English, foreign language, social science, science, and mathematics, are philosophy and psychology, Bible, and education.

**PRESCRIBED COLLEGE SUBJECTS.**

English is characterized as to number of semester hours prescribed by one uniform standard. Foreign language is characterized by great differences in the number of semester hours prescribed; Latin is not prescribed singly as a foreign language requirement, but in combination or in alternation with other languages. Mathematics is not prescribed for the A. B. degree by three-fifths of the State schools nor by two-fifths of the endowed schools. It is prescribed for the B. S. degree by over three-fifths of the State schools and by nearly six-sevenths of the endowed schools.

Only one-third of the State schools and one-sixth of the endowed schools prescribe mathematics for the B. Ed. degree. On the whole the tendencies in mathematics are more uniform than those of foreign language.

Both science and social science show great diversity of standards if the total number of cases are considered; the extremes are not as great, however, as in foreign language.

Philosophy and psychology are required for the A. B. degree by one-fourth of the State schools and by over two-fifths of the endowed schools. The standards as to the number of semester hours prescribed tend to be more uniform.

Bible occupies a comparatively insignificant place in the liberal arts' college curriculum.

Education is required for the degree in education by all State and endowed schools. The standards vary greatly in this subject, the mode, 24 semester hours, being rather small. The endowed schools prescribe more education than the State schools.

The miscellaneous prescribed subjects are hygiene, public speaking, art, drawing or drafting, mechanics, bibliography, library methods, and matriculation lectures. The number of hours prescribed in these subjects is very small.

The major subject is a requirement for the A. B. degree in 18 State and 12 endowed schools. The average number of hours for a major is 25 semester hours in State schools and 23.2 semester hours in the endowed.

The major and minors are utilized by nearly one-half of both State and endowed schools, the average total (major and minors) for the A. B. is 40 semester hours.

The total prescribed and total elective requirements show an astonishing diversity of standards, the difference between the extremes for the A. B. (State) being 90 semester hours, for the A. B. (endowed) 124 semester hours; corresponding differences are also found in the total elective requirements.

#### TOTAL COLLEGE REQUIREMENTS.

A certain uniformity in the total college requirements is evident from the table of averages, medians, and modes; nevertheless outside of this central group numerous standards exist which are extreme. The differences between extremes for the A. B. (State) is 43 semester hours, and for the A. B. (endowed) 61 semester hours. These differences amount to from one-third to one-half of the 4-year period if we take 120 semester hours as the standard course.

#### ELECTIVES OF COLLEGE REQUIREMENTS SEMIELECTIVES.

Sixteen State and 10 endowed schools require 1 semielective; 8 State and 7 endowed schools require 2 semielectives to be chosen; 3 State and 4 endowed schools require 3 semielectives to be chosen.

#### GROUP SYSTEMS.

Nine State and 4 endowed schools have departmental group systems with 6 to 21 departmental groups.

Twenty-two State and 19 endowed schools have general group systems composed of one or more departments.

Six institutions offer elective degree groups (four State and three endowed).

Four institutions, one State and three endowed, have group systems of a special type.

#### DISTRIBUTION OF PRESCRIBED COLLEGE SUBJECTS.

The following series shows the relation of the distribution of certain characteristic subjects with respect to the A. B. and B. S. degrees:

About 87.5 per cent of the B. S. (State) courses include science.

About 66.6 per cent of the A. B. (State) courses include science.

Fully 66.6 per cent of the B. S. (endowed) courses include science.

Nearly 66.6 per cent of the A. B. (endowed) courses include science.

About 73.4 per cent of the B. S. (State) courses include mathematics.

About 40 per cent of the A. B. (State) courses include mathematics.

About 85 per cent of the B. S. (endowed) courses include mathematics.

About 70 per cent of the A. B. (endowed) courses include mathematics.

About 88 per cent of the B. S. (State) courses include foreign language.

About 88 per cent of the A. B. (State) courses include foreign language.

About 96 per cent of the B. S. (endowed) courses include foreign language.

About 90 per cent of the A. B. (endowed) courses include foreign language.

The general tendency is to prescribe from four to five subjects for the different bachelor's degrees.

#### ENTRANCE AND COLLEGE GRADUATION REQUIREMENTS COMPARED.

The entrance requirements are in all cases more uniformly standardized than the college graduation requirements.

As to the total prescribed work, the general average for the entrance requirements is 68.02 per cent of the 4 years, while the general average of the college is only 40.77 per cent of the 4 years of college requirements. This shows that the prescribed entrance requirements average about 27 per cent more than those of the college.

The distribution is essentially the same as to the number and the subjects prescribed in both entrance and college requirements.

The preceding summary shows the following tendencies: Nearly 55 per cent of the higher institutions of our list grant but one cultural degree, namely, bachelor of arts. The endowed institutions do not reach quite the same figure. There are but 44 per cent of the latter which grant only the bachelor of arts degree.

Approximately 40 per cent limit the cultural degrees to two, namely, the A. B. and B. S. degrees.

The "credit for quality" plan of giving academic credits for graduation is in use by only 10 per cent of the institutions of our list.

There is a tendency on the part of State higher institutions to prescribe four subjects, English, language, social science, and mathematics; on the part of the endowed institutions the tendency is toward five subjects, the fifth subject being philosophy or psychology, singly or in combination. About 10 per cent of both State and endowed institutions prescribe for the A. B. degree only one or two subjects, while about 5 per cent prescribe three subjects.

Analysis of the method of distribution and concentration of prescribed college subjects shows that this distribution is determined by the prescribed subjects. Concentration is largely determined by the semielective, the major, or major and minor.

The data show clearly that the prescribed requirements for the bachelor of arts degree in the institutions of our list contain few, if any, fixed standards of quantity except in those of the total graduation requirements, which are at least 120 semester hours in the majority of instances. Aside from this, the quantitative standards in the different subjects and in the prescribed and elective requirements are about as numerous as the institutions themselves.

#### SUGGESTIONS.

1. The nomenclature of the first degree offered by schools of education deserves the consideration of educators, inasmuch as the regular four-year curricula in the 56 colleges and schools of education of our list lead to at least six different degrees, all signifying similar curricula or courses of study. These degrees are: Bachelor of arts, bachelor of science, bachelor of arts in education, bachelor of science in education, and bachelor of pedagogy. All the aforementioned degrees are granted at the end of four-year curricula, but the degree of bachelor of pedagogy sometimes signifies the degree given at the end of a three-year normal course. In view of the general harmony in the aim and content of the curricula leading to the bachelor's degrees in the schools of education, it would seem advisable that the proper authorities encourage the adoption of a standard nomenclature for the educational bachelor's degree.

2. The growing tendency on the part of State and endowed higher institutions to use the semester hour as the basis of credit would seem to indicate the desirability of further uniformity in the same direction. Colleges and universities should avoid, if possible, the use of ambiguous statements, such as "credit," "point," etc., when referring to the semester hour.

3. In view of the growing importance of systematic education and cultural training of college students in physical culture and personal hygiene and in view of the fact that this work is prescribed in some form or other by the majority of the institutions of our list, it would seem desirable that the work in these subjects be standardized in such a way as to be worthy of regular college credit. It is confusing in comparing the total requirements of the different colleges and universities to find that the larger total graduation requirements of one institution includes the prescribed work in physical training, military science, etc., while in the smaller total graduation requirements the prescribed physical training is not listed.

4. The extreme differences in the total prescribed requirements for the A. B. and B. S. degrees give evidence of the variety of standards which are presented by the institutions of our list. The question naturally arises: May there not be considerable difference in the quality of instruction when in one institution the average number of semester hours required per week is only 28, while in others it mounts up to 35 and even 43?

With such extremes in quantitative standards, it may be expected that the qualitative standards will vary to a considerable degree. The indications are that the time has come for a more careful standardization of the semester hour credit from the standpoint of quality.

## Chapter IV.

### THE BACHELOR'S DEGREE COURSE—A UNIT OF EIGHT YEARS.

In Chapters II and III the bachelor's degree has been considered from the standpoints of both the entrance and the college graduation requirements. In this chapter the bachelor's degree is considered as a unit of eight years instead of 2 units of four years each. Tables 51 to 70 show the relation of each subject to the eight-year period of both entrance and college work. Table 71 shows the relations of each subject both singly and in combination, which are prescribed both for entrance and college.

The purpose of these tables is to point out a possible basis for the improvement of articulation between the secondary schools and the colleges, and also to indicate to what extent continuity exists in the individual or the several prescribed subjects during the entire eight-year period.

In view of the fact that the curricula of both high school and the college have been organized largely from independent and perhaps antagonistic viewpoints, there appears in many institutions unnecessary duplication of work caused by a failure to conceive of the high school and college curricula in relation to a single purpose. On the other hand there are those institutions whose collegiate curricula show coherent relationship with those of the secondary schools.

TABLE 51.—*Average of entrance and graduation requirements in English.*

(Per cent of the total time in high school and college—8 years.)

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of California.....	6.66
2	University of Nebraska.....	8.31
3	University of California.....	9.23
4	University of Wisconsin.....	9.64
5	Cornell University (N. Y.).....	10
6	Indiana University.....	11.04
7	University of Illinois.....	11.62
8	Ohio State University.....	11.66
9	University of Florida.....	11.87
10	University of Porto Rico.....	11.87
11	University of Kansas.....	12.08
12	University of South Dakota.....	12.34
13	University of Wyoming.....	12.43
14	University of Missouri.....	12.46
15	University of Colorado.....	12.50
16	Howard University (D. C.).....	12.50



TABLE 51.—Average of entrance and graduation requirements in English—Continued.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
17	University of Michigan.....	12.50
18	University of Minnesota.....	12.50
19	University of Nevada.....	12.50
20	Ohio University.....	12.50
21	Miami University.....	12.50
22	University of Oregon.....	12.50
23	University of Utah.....	12.50
24	University of Washington.....	12.50
25	Rutgers College (N. J.).....	13.03
26	University of Arkansas.....	13.09
27	University of Oklahoma.....	13.27
28	West Virginia University.....	14.03
29	University of Maine.....	14.09
30	University of North Dakota.....	14.10
31	State University of Iowa.....	14.16
32	University of Vermont.....	14.30
33	University of Kentucky.....	14.68
34	University of Idaho.....	15
35	University of New Mexico.....	15
36	University of South Carolina.....	15.06
37	Louisiana State University.....	15.12
38	University of Mississippi.....	15.12
39	University of Georgia.....	15.33
40	University of Alabama.....	15.71
41	University of Tennessee.....	15.71
42	University of Texas.....	15.71
43	University of Montana.....	15.84
44	Pennsylvania State College.....	16.39
45	State University of North Carolina.....	16.54
46	State University of Arizona.....	16.66
47	State College of Washington.....	16.66
48	Delaware College.....	16.97
49	College of William and Mary.....	16.97
50	University of Virginia.....	18.21

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Yale University.....	8.82
2	Catholic University of America (medical group, school of sciences).....	9.84
3	Princeton University.....	10.68
4	Catholic University of America (school of philosophy, economics group).....	11.31
5	Harvard University.....	11.59
6	Catholic University of America (school of philosophy).....	11.63
7	Beloit College.....	11.66
8	Catholic University of America (school of sciences).....	11.66
9	Earlham College.....	11.66
10	Oberlin College.....	11.69
11	Colgate University.....	11.84
12	Williams College.....	11.96
13	Vanderbilt University.....	12.33
14	University of Pittsburgh.....	12.33
15	Washington and Lee University.....	12.38
16	Western Reserve University.....	12.45
17	Carleton College.....	12.50
18	George Washington University (group 3).....	12.50
19	Grinnell College.....	12.50
20	New York University.....	12.50
21	Syracuse University.....	12.50
22	Tufts College.....	12.50
23	Wellesley College.....	12.54
24	Lafayette College.....	12.66
25	Vassar College.....	12.72
26	University of Chicago.....	12.79
27	Dartmouth College.....	12.82
28	Smith College.....	12.85
29	Wesleyan University.....	12.85
30	Amherst College.....	13.16
31	Bowdoin College.....	13.29
32	Catholic University of America (Latin—historical group, school of letters).....	13.32
33	Haverford College.....	13.46
34	Columbia University.....	14.16
35	Northwestern University.....	14.17
36	Swarthmore College.....	14.35
37	Tulane University.....	14.68
38	Trinity College (N. C.).....	14.69
39	Wells College.....	14.69

TABLE 51.—Average of entrance and graduation requirements in English—Continued.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
40	Baker University .....	15
41	Colorado College .....	15
42	George Washington University (groups 1, 2, 4, 5) .....	15
43	Washington University .....	15
44	University of the South .....	15.12
45	Johns Hopkins University .....	15.15
46	Catholic University of America (mod. lang. group, school of letters) .....	15.29
47	Brown University .....	15.33
48	University of Pennsylvania .....	15.33
49	Union University .....	16.86
50	Muhlenberg College .....	17.14
51	Randolph-Macon College .....	17.72
52	Bryn Mawr College .....	18.33
53	DePauw University .....	18.54
54	Hamilton College .....	20

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nebraska .....	8.31
2	University of Illinois .....	11.21
3	University of Florida .....	11.87
4	University of Porto Rico .....	11.87
5	University of Kansas .....	12.08
6	New Hampshire College .....	12.27
7	University of Kentucky .....	12.34
8	Howard University (D. C.) .....	12.50
9	University of Michigan .....	12.50
10	University of Nevada .....	12.50
11	Rutgers College (N. J.) .....	13.03
12	University of North Dakota .....	14.11
13	University of Vermont .....	14.12
14	University of Arizona .....	14.16
15	College of William and Mary .....	14.45
16	College of Hawaii .....	14.69
17	University of Idaho .....	15
18	University of South Carolina .....	15.06
19	University of Mississippi .....	15.32
20	University of Alabama .....	15.71
21	University of Virginia .....	15.71
22	State College of Washington .....	16.66
23	Delaware College .....	16.97
24	University of Virginia .....	18.21

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Princeton University .....	10.68
2	Harvard University .....	11.59
3	Beloit College .....	11.66
4	Earlham College .....	11.66
5	Colgate University .....	11.84
6	Vanderbilt University .....	12.33
7	University of Pittsburgh .....	12.33
8	Carleton College .....	12.50
9	Grinnell College .....	12.50
10	New York University .....	12.50
11	Syracuse University .....	12.50
12	Tufts College .....	12.50
13	Lafayette College .....	12.59
14	University of Chicago .....	12.74
15	Dartmouth College .....	12.83
16	Wesleyan University .....	12.83
17	Bowdoin College .....	13.29
18	Haverford College .....	13.46
19	Catholic University of America .....	13.87
20	Columbia University .....	14.16
21	Northwestern University .....	14.17
22	Tulane University .....	14.23
23	Muhlenberg College .....	14.29
24	University of the South .....	15.12
25	Union University .....	17.22
26	Randolph-Macon College .....	17.73
27	Hamilton College .....	20

TABLE 51.—Average of entrance and graduation requirements in English—Continued.

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Nebraska.....	8.31
2	University of Alabama.....	10.71
3	University of Oregon.....	11.25
4	University of Florida.....	11.87
5	University of Kansas.....	11.90
6	University of Washington.....	12.41
7	University of Wyoming.....	12.43
8	University of Colorado.....	12.50
9	University of Michigan.....	12.50
10	University of Minnesota.....	12.50
11	University of Missouri.....	12.50
12	University of Nevada.....	12.50
13	University of Utah.....	12.50
14	University of Arkansas.....	13.09
15	University of Oklahoma.....	13.12
16	University of Idaho.....	13.33
17	University of North Dakota.....	14.10
18	State University of Iowa.....	14.16
19	Ohio State University.....	14.16
20	University of Vermont.....	14.30
21	University of New Mexico.....	14.69
22	Howard University (D. C.).....	14.76
23	University of South Carolina.....	15.06
24	Louisiana State University.....	15.12
25	University of Georgia.....	15.26
26	University of Mississippi.....	15.32
27	University of Texas.....	15.47
28	University of North Carolina.....	15.71
29	University of Tennessee.....	15.71
30	Miami University.....	23.33

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	12.34
2	George Washington University.....	12.42
3	University of Chicago.....	12.75
4	Johns Hopkins University and Goucher College.....	13.33
5	Tulane University.....	14.54
6	Columbia University.....	15.00

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	14.30
1	Rutgers College (N. J.) (for Litt. B.).....	13.03

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (for Ph. B.).....	11.64
2	Lafayette College (for Ph. B.).....	11.66
3	University of Chicago (for Ph. B.).....	12.74
4	Brown University (for Ph. B.).....	15.33
5	Muhlenberg College (for Ph. B.).....	17.14
6	Union University (for Ph. B.).....	17.23
7	Hamilton College (Ph. B.).....	20
1	Princeton University (for Litt. B.).....	10.68

# THE PRESCRIBED SUBJECTS IN RELATION TO THE EIGHT-YEAR PERIOD.

## ENGLISH.

English is prescribed for the different bachelor's degree curricula either as entrance or college requirements by all the institutions of our list, the amount varying from 6.66 per cent to 20 per cent according to Table 51.

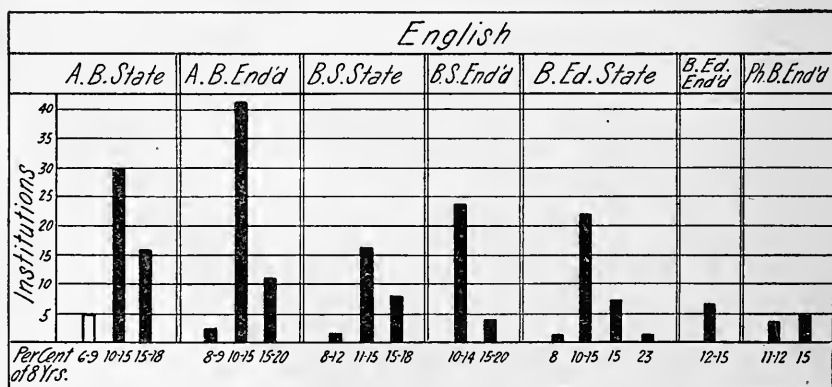
The following table shows in terms of the percentage of the eight-year period, the minimum, maximum, average, median, and mode of English.

TABLE 52.—*English.*

No. of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
50	A. B. (State).....	6.66	18.21	13.12	13.06	12.50
54	A. B. (endowed).....	8.82	20.00	13.53	12.85	12.50
25	B. S. (State).....	8.31	18.21	13.74	13.57	14-15
27	B. S. (endowed).....	10.68	20.00	12.96	12.74	12-13
30	B. Ed. (State).....	8.31	23.33	13.65	13.23	12-13
6	B. Ed. (endowed).....	12.34	15.00	13.39	13.04	12-13
1	Ph. B. (State).....	14.30	.....	.....	.....	.....
7	Ph. B. (endowed).....	11.64	20.00	15.25	15.33	.....
1	Litt. B. (State).....	13.03	.....	.....	.....	.....
1	Litt. B. (endowed).....	10.68	.....	.....	.....	.....
203	General average.....	.....	.....	13.46	.....	.....

The total requirements in English are quite uniform for the different degrees. That the requirements of the State schools for the B. S. and B. Ed. should be more than the requirements of the corresponding courses of the endowed schools is not what might be expected. The requirements of the Ph. B. (endowed) are the highest of all. It may also be noted that the highest joint requirement in English is that of Miami University, which prescribes 23.33 per cent for the B. Ed. degree.

Graph 20 clearly points out a mode in English of from 10 to 15 per cent of the eight-year period for all of the degrees concerned.



GRAPH 20.

TABLE 53.—Average of entrance and college requirements in foreign language.

[Per cent of the total time in high school and college—8 years.]

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of North Dakota.....	4.09
2	University of South Carolina.....	4.35
3	University of Mississippi.....	4.61
4	University of South Dakota.....	4.68
5	University of Utah.....	6.25
6	University of Michigan.....	6.66
7	State College of Washington.....	6.66
8	University of Wyoming.....	6.66
9	University of Florida.....	8.75
10	University of Illinois.....	9.10
11	University of California (plan B).....	9.23
12	University of Oklahoma.....	9.94
13	State University of Iowa.....	10
14	University of Nebraska.....	10
15	University of Arkansas.....	10.71
16	University of Missouri.....	10.76
17	University of Louisiana.....	11.55
18	University of Idaho.....	11.66
19	University of Montana.....	11.66
20	University of Kentucky.....	12.13
21	University of New Mexico.....	12.50
22	Miami University.....	12.50
23	University of Oregon.....	12.50
24	University of Arizona.....	13.33
25	University of Colorado.....	13.33
26	Howard University (D. C.).....	13.33
27	University of Washington.....	13.33
28	University of Minnesota.....	13.33
29	University of Porto Rico.....	13.54
30	University of Kansas.....	14.16
31	Indiana University.....	14.58
32	University of West Virginia.....	14.73
33	University of Texas.....	15.71
34	University of Maine.....	16.60
35	University of California (plan A).....	18.45
36	Cornell University (N. Y.).....	19.16
37	University of North Carolina (group 3).....	19.28
38	University of Tennessee.....	19.28
39	Ohio State University.....	20
40	Ohio University.....	20
41	University of Alabama.....	20.71
42	College of William and Mary.....	20.71
43	University of Virginia.....	21.78
44	Delaware College.....	26.11
45	Pennsylvania State College.....	27.91
46	University of Wisconsin.....	28.08
47	University of Georgia.....	28.62
48	Howard University (D. C.).....	30.00
49	University of North Carolina (group 2).....	31.18
50	Rutger's College (N. J.).....	31.65
51	University of North Carolina (group 1).....	32.01
52	University of Vermont.....	32.02

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	4.68
2	Swarthmore College.....	4.83
3	Beloit College.....	11.66
4	George Washington University.....	11.66
5	Tufts College.....	11.66
6	Northwestern University.....	12.50
7	Wesleyan University.....	12.85
8	Wellesley College.....	13.33
9	Western Reserve University.....	13.33
10	Colgate University.....	13.67
11	Earlham College.....	11.16
12	Baker University.....	15.00
13	DePauw University.....	16.04
14	Bowdoin College.....	16.23
15	Carleton College.....	16.66
16	George Washington University (group 2).....	16.66

TABLE 53.—Average of entrance and college requirements in foreign language—Contd.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
17	Oberlin College.....	16.71
18	Harvard University.....	17.12
19	University of Pennsylvania.....	17.83
20	Colorado University.....	18.33
21	Washington and Lee University.....	18.57
22	Smith College.....	18.80
23	George Washington University (group 1).....	19.16
24	Tulane University (literary course).....	19.36
25	Trinity College (N. C.) (group B).....	20.36
26	Columbia University.....	20.83
27	Grinnell College.....	21.66
28	Washington University, St. Louis.....	21.66
29	Tulane University (classical course).....	21.71
30	Amherst College.....	22.77
31	Haverford College.....	23.15
32	Syracuse University.....	24.17
33	Trinity College (N. C.) (group A).....	24.68
34	Vanderbilt University.....	24.69
35	Catholic University of America (medical group, school of sciences).....	25.08
36	Catholic University of America (school of sciences).....	25.17
37	Yale University.....	25.58
38	Dartmouth College.....	25.67
39	Wells College.....	25.91
40	Princeton University.....	26.11
41	Catholic University of America (economics group, school of philosophy).....	26.69
42	Brown University.....	27.23
43	New York University.....	27.50
44	University of the South.....	28.25
45	Vassar College.....	28.78
46	Bryn Mawr College.....	29.16
47	Johns Hopkins University.....	30.55
48	Catholic University of America (school of philosophy).....	30.94
49	Williams College.....	32.18
50	Union University.....	33.38
51	Randolph-Macon College.....	34.70
52	Hamilton College.....	35.17
53	Lafayette College.....	35.65
54	University of Chicago.....	36.77
55	Union University.....	38.42
56	Muhlenberg College.....	39.52
57	Catholic University of America (modern language group, school of letters).....	41.91
58	Catholic University of America (Latin-historical group, school of letters).....	43.91
59	Catholic University of America (classical group, school of letters).....	45.89

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nevada.....	2.50
2	University of North Dakota.....	4.09
3	University of South Carolina.....	4.35
4	University of Mississippi.....	4.61
5	College of Hawaii.....	4.68
6	University of Alabama.....	5.00
7	University of Illinois.....	6.50
8	State College of Washington.....	6.66
9	University of Florida.....	8.75
10	Howard University.....	9.16
11	University of Nebraska.....	10.00
12	University of Kentucky.....	11.35
13	University of Vermont.....	11.43
14	University of Idaho.....	11.66
15	Delaware College.....	11.83
16	College of William and Mary.....	12.14
17	University of Arizona.....	13.33
18	University of Porto Rico.....	13.54
19	University of Kansas.....	14.16
20	Rutgers College (N. J.).....	15.29
21	University of Virginia.....	19.28
22	University of Virginia (in special subject).....	21.78

TABLE 53.—Average of entrance and college requirements in foreign language—Contd.

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Pittsburgh.....	4.68
2	Columbia University.....	5.00
3	Tufts College.....	9.16
4	Tulane University.....	10.89
5	Lafayette College.....	11.37
6	Beloit College.....	11.66
7	Carleton College.....	11.66
8	Bowdoin College.....	12.78
9	Grinnell College.....	11.33
10	Colgate University.....	13.67
11	Harvard University.....	14.09
12	Earlham College.....	14.16
13	Union University.....	14.39
14	New York University.....	15.00
15	Dartmouth College.....	15.33
16	Catholic University of America (school of sciences).....	15.33
17	Wesleyan University.....	16.90
18	Princeton University.....	17.68
19	Muhlenberg College.....	17.86
20	Syracuse University.....	18.33
21	Vanderbilt University.....	20.35
22	University of the South.....	23.10
23	Haverford College.....	23.15
24	Northwestern University.....	23.33
25	Randolph-Macon College.....	23.65
26	Hamilton College.....	31.73

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nevada.....	2.50
2	University of South Carolina.....	4.35
3	University of Mississippi.....	4.61
4	University of North Dakota.....	6.53
5	University of Michigan.....	6.66
6	University of Oregon.....	6.66
7	University of Washington.....	6.66
8	University of Wyoming.....	6.66
9	University of Florida.....	8.75
10	University of Oklahoma.....	9.78
11	State University of Iowa.....	10.00
12	University of Nebraska.....	10.00
13	University of Alabama.....	10.71
14	University of Missouri.....	10.83
15	Louisiana State University.....	11.55
16	University of Idaho.....	11.66
17	University of New Mexico.....	12.13
18	University of Colorado.....	13.33
19	University of Minnesota.....	13.33
20	Miami University.....	13.33
21	University of Kansas.....	13.78
22	University of Texas.....	15.47
23	University of Georgia.....	16.23
24	University of Tennessee.....	19.28
25	Ohio State University.....	20.00
26	University of North Carolina.....	27.85
27	Howard University.....	29.52
28	University of Vermont.....	32.05

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Columbia University.....	2.50
2	University of Pittsburgh (for B. S.).....	4.68
3	University of Pittsburgh (for A. B.).....	9.37
4	Tulane University.....	11.22
5	George Washington University.....	11.50
6	Johns Hopkins University and Goucher College.....	20.00

TABLE 53.—*Average of entrance and college requirements in foreign language—Contd.*

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Vermont (for Ph. B.).....	25.43
1	Rutgers College (N. J.) (for Litt. B.).....	31.65

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Brown University (for Ph. B.).....	13.66
2	Lafayette College (for Ph. B.).....	26.45
3	Muhlenberg College (for Ph. B.).....	29.52
4	Catholic University of America (for Ph. B.).....	30.47
5	Hamilton College (for Ph. B.).....	31.73
6	Union University (for Ph. B.).....	33.74
1	Princeton University (for Litt. B.).....	17.68

## FOREIGN LANGUAGE.

According to Table 53 foreign language is prescribed either as entrance or college requirements by all the institutions of our list with the possible exception of Leland Stanford University. The amount varies from 4.09 per cent to 45.89 per cent of the eight-year period.

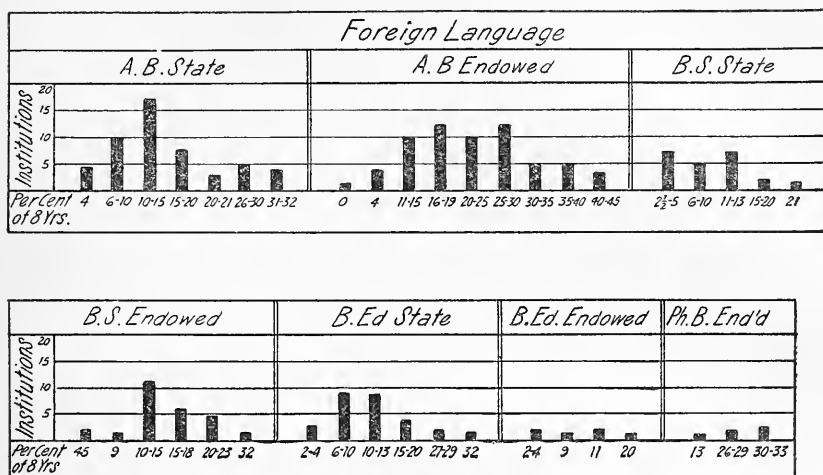
TABLE 54.—*Foreign language.*

Num- ber of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
52	A. B. (State).....	4.09	32.02	15.55	13.33	10-15
59	A. B. (endowed).....	4.68	45.98	23.33	21.66	
22	B. S. (State).....	2.50	21.78	10.11	10.48	
26	B. S. (endowed).....	4.68	31.73	15.73	14.28	
28	B. Ed. (State).....	2.50	32.05	13.01	10.77	
5	B. Ed. (endowed).....	4.68	20.00	11.35	11.22	
1	Ph. B. (State).....	25.43				
6	Ph. B. (endowed).....	13.66	33.74	27.59	30.00	
1	Litt. B. (State).....	31.65				
1	Litt. B. (endowed).....	17.68				
201	General average.....			17.26		

According to Table 54 less uniformity appears in the joint requirements of foreign language than in English. The A. B. (endowed) and the Ph. B. (endowed) are much higher than the general average. The B. S. (State) and the B. Ed. (endowed) are the lowest, their requirements being approximately one-half of those of the two highest averages. The general average for foreign language approximates 4 per cent more than that of English.

According to Graph 21 the requirement in foreign language of from 10 to 15 per cent is the mode for the A. B. (State) and the B. S. (endowed). There is less uniformity in the standards of the A. B. (endowed), the B. S. (State), and the B. Ed. (State).





Graph 21.

TABLE 55.—Average of entrance and college requirements in mathematics.  
[Per cent of 8 years' work.]

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of North Dakota.....	3.33
2	University of Missouri.....	4.56
3	Indiana University.....	6.25
4	University of Porto Rico.....	6.25
5	University of Illinois.....	6.58
6	University of Colorado.....	6.66
7	University of Idaho.....	6.66
8	University of Michigan.....	6.66
9	University of Minnesota.....	6.66
10	University of Montana.....	6.66
11	University of Nebraska.....	6.66
12	University of New Mexico.....	6.66
13	Cornell University.....	6.66
14	University of Nevada.....	6.66
15	Ohio State University.....	6.66
16	Ohio University.....	6.66
17	Miami University.....	6.66
18	University of Oklahoma.....	6.66
19	University of Oregon.....	6.66
20	University of South Dakota.....	6.66
21	State College of Washington.....	6.66
22	West Virginia University.....	6.66
23	University of Wyoming.....	6.66
24	University of Arkansas.....	7.14
25	Pennsylvania State College.....	7.14
26	University of Wisconsin.....	7.14
27	State University of Iowa.....	8.33
28	University of Arizona.....	8.33
29	University of Kentucky.....	8.33
30	University of Utah.....	8.33
31	University of Washington.....	8.33
32	University of Maine.....	8.61
33	Howard University (D. C.).....	9.16
34	University of California.....	9.23
35	University of Kansas.....	10.41
36	Louisiana State University.....	11.13
37	University of Mississippi.....	11.23
38	University of Tennessee.....	11.43
39	University of Texas.....	11.43
40	University of Vermont.....	11.78
41	College of William and Mary.....	11.84
42	University of Florida.....	11.87
43	College of Delaware.....	12.05
44	University of North Carolina.....	12.26
45	Rutger's College (N. J.).....	13.03
46	University of Alabama.....	13.21
47	University of Georgia.....	13.54
48	University of Vermont.....	13.98
49	University of South Carolina.....	15.06

TABLE 55.—Average of entrance and college requirements in mathematics—Continued.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Beloit College.....	6.66
2	University of Chicago.....	6.66
3	University of Pittsburgh.....	6.66
4	Harvard University.....	7.57
5	De Pauw University.....	7.81
6	Colgate University.....	8.33
7	Earlham College.....	8.33
8	George Washington University (group 2).....	8.33
9	Bowdoin College.....	8.61
10	University of Pennsylvania.....	8.61
11	Smith College.....	8.61
12	Wesleyan University.....	8.61
13	Johns Hopkins University.....	8.67
14	Yale University.....	8.82
15	Northwestern University.....	9.16
16	Syracuse University.....	9.16
17	Tufts College.....	9.16
18	Bryn Mawr College.....	10
19	Carleton College.....	10
20	Colorado College.....	10
21	Oberlin College.....	10
22	Washington and Lee University.....	10.71
23	Princeton University.....	10.74
24	Catholic University of America (economics group, school of philosophy).....	10.78
25	Baker University.....	10.83
26	George Washington University (groups 1, 4, 5).....	10.83
27	Grinnell College.....	10.83
28	New York University.....	10.83
29	Lafayette College.....	10.92
30	Catholic University of America (school of philosophy).....	10.94
31	Hamilton College.....	11.03
32	Swarthmore College.....	11.08
33	Brown University.....	11.11
34	Dartmouth College.....	11.11
35	Catholic University of America.....	11.19
36	Wells College.....	11.22
37	Catholic University of America (medical group, school of sciences).....	11.34
38	Vanderbilt University.....	11.45
39	Haverford University.....	11.73
40	Union University.....	11.83
41	Williams College.....	11.84
42	Muhlenberg College.....	11.90
43	Columbia University.....	12.08
44	Amherst College.....	12.21
45	Trinity College (N. C.).....	12.34
46	Catholic University of America (school of sciences).....	12.42
47	Western Reserve University.....	12.45
48	Wellesley College.....	12.64
49	Vassar College.....	12.72
50	Randolph-Macon College.....	12.84
51	University of the South.....	12.92
52	George Washington University (group 3).....	13.33
53	Tulane University of Louisiana.....	13.92

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of North Dakota.....	3.33
2	University of Porto Rico.....	6.25
3	University of Nebraska.....	6.66
4	New Hampshire College.....	6.66
5	University of Nevada.....	6.66
6	State College of Washington.....	6.66
7	Howard University.....	9.16
8	University of Illinois.....	9.92
9	University of Idaho.....	10
10	University of Kansas.....	10.4
11	University of Arkansas.....	10.26
12	University of Mississippi.....	11.23
13	University of Arizona.....	11.66
14	University of Florida.....	11.87
15	Delaware College.....	12.06
16	University of Kentucky.....	12.23
17	Rutgers College (N. J.).....	13.03
18	College of William and Mary.....	13.09
19	University of Vermont.....	13.91
20	University of Virginia.....	13.93
21	University of Alabama.....	14.88
22	University of South Carolina.....	15.06

TABLE 55.—Average of entrance and college requirements in mathematics—Continued.

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Beloit College.....	6.66
2	University of Chicago.....	6.66
3	University of Pittsburgh.....	6.66
4	Harvard University.....	7.57
5	Earlham College.....	8.23
6	Northwestern University.....	9.16
7	Syracuse University.....	9.16
8	Tufts College.....	9.16
9	Carleton College.....	10
10	Princeton University.....	10.74
11	Grinnell College.....	10.83
12	Hamilton College.....	11.03
13	Dartmouth College.....	11.11
14	Wesleyan College.....	11.11
15	Bowdoin College.....	11.55
16	Haverford College.....	11.73
17	Muhlenberg College.....	11.90
18	Colgate University.....	12.01
19	Columbia University.....	12.08
20	Randolph-Macon College.....	12.84
21	Lafayette College.....	13.00
22	Vanderbilt University.....	13.12
23	New York University.....	14.16
24	University of the South.....	15.12
25	Union University.....	16.51
26	Tulane University.....	17.04
27	Catholic University of America (school of sciences).....	17.25

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Mississippi.....	2.31
2	University of North Dakota.....	3.33
3	University of Missouri.....	4.58
4	University of Colorado.....	6.66
5	University of Idaho.....	6.66
6	University of Michigan.....	6.66
7	University of Minnesota.....	6.66
8	University of New Mexico.....	6.66
9	University of Nebraska.....	6.66
10	University of Nevada.....	6.66
11	Ohio State University.....	6.66
12	Miami University.....	6.66
13	University of Oregon.....	6.66
14	University of Oklahoma.....	6.66
15	University of Utah.....	6.66
16	University of Washington.....	6.66
17	University of Wyoming.....	6.66
18	State University of Iowa.....	8.33
19	Howard University (D. C.).....	9.04
20	University of Florida.....	9.37
21	University of Kansas.....	10.23
22	University of Alabama.....	10.71
23	Louisiana State University.....	11.13
24	University of Texas.....	11.13
25	University of Tennessee.....	11.43
26	University of Vermont.....	11.78
27	University of North Carolina.....	12.26
28	University of Georgia.....	13.47
29	University of South Carolina.....	15.06

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	6.66
2	Johns Hopkins University and Goucher College.....	6.66
3	George Washington University.....	8.33
4	Tulane University.....	13.78

TABLE 55.—Average of entrance and college requirements in mathematics—Continued.

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Vermont (for Ph. B.).....	11.78
1	Rutgers College (N. J.) (for Litt. B.).....	13.03

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Brown University (for Ph. B.).....	8.61
2	Lafayette College (for Ph. B.).....	10.92
3	Catholic University of America (for Ph. B.).....	10.94
4	Hamilton College (for Ph. B.).....	11.03
5	Union University (for Ph. B.).....	11.83
6	Muhlenberg College (for Ph. B.).....	11.90
1	Princeton University (for Litt. B.).....	10.74

## MATHEMATICS.

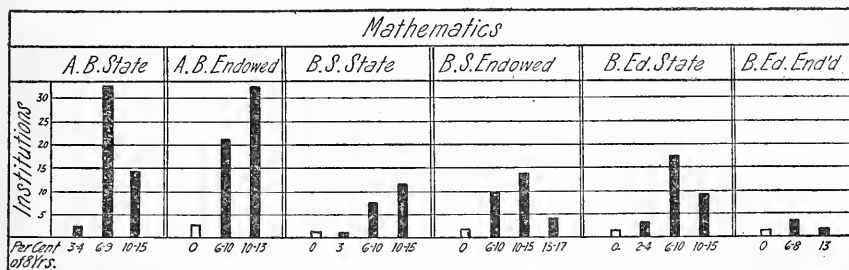
Mathematics is prescribed for the A. B. degree either as an entrance or college requirement by all the institutions of our list with the exception of Chicago University and Leland Stanford University. (Table 55.) It is also required for the B. S. degree with the exception of the University of Chicago and the College of Hawaii. It is prescribed in all cases for the first degree on education with the exception of the Universities of Chicago and of Arkansas.

TABLE 56.—*Mathematics.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
49	A. B. (State).....	3.33	15.06	8.59	7.14	6.66
53	A. B. (endowed).....	6.66	13.92	10.24	10.83	10-11
22	B. S. (State).....	3.33	15.06	10.40	10.74	6.66
28	B. S. (endowed).....	6.66	17.25	11.36	11.03	11-12
29	B. Ed. (State).....	2.31	15.06	8.19	6.66	6.66
4	B. Ed. (endowed).....	6.66	13.78	8.85	7.00	.....
1	Ph. B. (State).....	11.78	.....	.....	.....	.....
6	Ph. B. (endowed).....	8.61	11.90	10.87	11.00	.....
1	Litt. B. (State).....	13.03	.....	.....	.....	.....
1	Litt. B. (endowed).....	10.74	.....	.....	.....	.....
194	General average.....	.....	.....	9.66	.....	.....

According to Table 56, mathematics reaches its highest average requirements in the A. B. (endowed), B. S. (State), B. S. (endowed), and Ph. B. (endowed). The A. B. (State) and the B. Ed. (both State and endowed) are about 2 per cent less in their average requirements than English or foreign language. The general average for mathematics (9.66) is about 4 per cent less than the general average for English and about 8 per cent less than that of foreign language.

Graph 22 clearly indicates 2 modes, one from 5 to 10 per cent and the other from 10 to 15 per cent. This is true for all degrees given in the graph.



GRAPH 22.

TABLE 57.—Average of entrance and college requirements in science.

[Per cent of 8-years' work.]

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Pennsylvania State College.....	2.27
2	University of Georgia.....	2.31
3	Cornell University (N. Y.).....	2.50
4	Rutgers College (N. J.).....	3.03
5	University of Porto Rico.....	3.12
6	University of Florida.....	3.13
7	University of Michigan.....	3.33
8	University of Nebraska.....	3.33
9	University of New Mexico.....	3.33
10	University of Oregon.....	3.33
11	University of Wyoming.....	3.33
12	Indiana University.....	3.54
13	University of Missouri.....	4.09
14	University of Minnesota.....	5.00
15	University of Texas.....	5.00
16	University of Utah.....	5.00
17	State College of Washington.....	5.00
18	University of South Carolina.....	5.74
19	University of Montana.....	5.84
20	University of Kentucky.....	6.06
21	College of William and Mary.....	6.25
22	University of North Dakota.....	6.55
23	West Virginia University.....	6.55
24	University of Illinois.....	6.58
25	University of Oklahoma.....	6.60
26	University of Louisiana.....	6.61
27	University of Alabama.....	6.66
28	University of Arizona.....	6.66
29	University of Colorado.....	6.66
30	Miami University.....	6.66
31	University of Mississippi.....	6.92
32	University of California.....	7.17
33	Delaware College.....	8.25
34	University of North Carolina.....	8.57
35	University of Virginia.....	10.00
36	University of Washington.....	10.00
37	University of Kansas.....	10.83
38	Ohio State University.....	10.83
39	Ohio University.....	10.83
40	University of California.....	12.79
41	University of Idaho.....	19.16

TABLE 57.—Average of entrance and college requirements in science—Continued.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Hamilton College.....	0.81
2	Columbia University.....	1.25
3	Union University.....	1.45
4	University of the South.....	2.21
5	Swarthmore College.....	2.42
6	Brown University.....	2.50
7	George Washington University (group 2).....	2.50
8	Tufts College.....	2.50
9	Yale University.....	2.50
10	Wellesley College.....	2.54
11	Vassar College.....	2.72
12	Muhlenberg College.....	2.85
13	Harvard University.....	3.03
14	Princeton University.....	3.17
15	Earlham College.....	3.33
16	Northwestern University.....	3.33
17	Colgate University.....	3.67
18	Tulane University.....	3.92
19	Catholic University of America (school of letters).....	3.94
20	Lafayette College.....	4.23
21	Vanderbilt University.....	4.68
22	Amherst College.....	4.91
23	New York University.....	5.00
24	Wells College.....	5.21
25	Beloit College.....	5.87
26	Grinnell College.....	5.82
27	Syracuse University.....	5.87
28	Washington University.....	5.83
29	Johns Hopkins University.....	5.85
30	Oberlin College.....	5.87
31	Bryn Mawr College.....	6.66
32	George Washington University (group 3).....	7.50
33	Catholic University of America (economics group, school of philosophy).....	8.14
34	Baker University.....	8.33
35	Catholic University of America (school of philosophy).....	8.41
36	Colorado College.....	9.17
37	Catholic University of America (school of sciences).....	9.17
38	George Washington University (group 5, medical).....	16.66
39	Catholic University of America (medical group, school of sciences).....	27.97

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Porto Rico.....	3.12
2	University of Nebraska.....	3.33
3	New Hampshire College.....	3.33
4	College of Hawaii.....	4.68
5	State College of Washington.....	5.00
6	University of Florida.....	5.73
7	University of South Carolina.....	5.74
8	University of North Dakota.....	6.55
9	University of Mississippi.....	6.92
10	Delaware College.....	8.25
11	University of Arizona.....	10.00
12	University of Idaho.....	10.00
13	University of Virginia.....	10.00
14	University of Kansas.....	10.83
15	University of Vermont.....	12.52
16	University of Illinois.....	13.17
17	University of Alabama.....	13.33
18	Rutger's College (N. J.).....	16.06
19	College of William and Mary.....	18.08
20	University of Kentucky.....	18.56
21	Howard University.....	21.66

TABLE 57.—Average of entrance and college requirements in science—Continued.

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Hamilton College.....	0.81
2	Tufts College.....	2.50
3	Harvard University.....	3.03
4	Earlham College.....	3.33
5	Dartmouth College.....	3.44
6	Princeton University.....	3.96
7	Vanderbilt University.....	4.68
8	Colgate University.....	5.51
9	Beloit College.....	5.83
10	Grinnell College.....	5.83
11	Northwestern University.....	6.66
12	Lafayette College.....	7.55
13	New York University.....	8.33
14	University of the South.....	8.82
15	Syracuse University.....	9.16
16	Union University.....	9.37
17	Columbia University.....	10
18	Catholic University of America (school of sciences).....	16.14
19	Tulane University of Louisiana.....	17.23
20	Muhlenberg College.....	24.04
21	University of Chicago.....	26.13

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	2.38
2	University of North Carolina.....	2.50
3	University of Florida.....	3.13
4	University of Michigan.....	3.33
5	University of New Mexico.....	3.33
6	University of Nebraska.....	3.33
7	University of Oregon.....	3.33
8	University of Arkansas.....	3.57
9	University of Missouri.....	4.16
10	University of Georgia.....	4.54
11	University of Texas.....	4.76
12	University of Minnesota.....	5
13	University of Wyoming.....	5.77
14	University of Oklahoma.....	6.45
15	University of North Dakota.....	6.55
16	University of Washington.....	6.56
17	Louisiana State University.....	6.61
18	University of Colorado.....	6.66
19	University of Idaho.....	6.66
20	Ohio State University.....	6.66
21	Miami University.....	6.66
22	University of South Carolina.....	7.91
23	University of Mississippi.....	9.23
24	University of Kansas.....	10.45

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh (A. B.).....	2.34
2	George Washington University.....	2.41
3	Columbia University.....	3.33
4	Johns Hopkins University and Goucher College.....	5.83
5	University of Pittsburgh (B. S.).....	7.02
6	Tulane University.....	10.93

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutgers College (N. J.) (for Litt. B.).....	3.03
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TABLE 57.—*Average of entrance and college requirements in science—Continued.*

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	Hamilton College (for Ph. B.).....	0.81
2	Union University (for Ph. B.).....	1.45
3	Muhlenberg College (for Ph. B.).....	2.85
4	Brown University (for Ph. B.).....	5
5	Lafayette College (for Ph. B.).....	7.68
6	Catholic University of America (for Ph. B.).....	8.42
1	Princeton University (for Litt. B.).....	3.96

## SCIENCE.

According to Table 57 science is not prescribed for the A. B. degree either for entrance or for college by 10 State and 14 endowed schools of our list, as follows: Arkansas, Iowa, Maine, Nevada, South Dakota, Wisconsin, Howard, North Carolina, Tennessee, Vermont, Leland Stanford, Bowdoin, Carleton, Chicago, De Pauw, Pennsylvania, Pittsburg, Dartmouth, Williams, Western Reserve, Tulane, Trinity, Washington and Lee, and Wesleyan.

The following institutions do not include science in the list of prescribed subjects for the B. S. degree: Nevada, Carleton, Pittsburg, Bowdoin, Haverford, Wesleyan, and Randolph-Macon.

The following institutions do not prescribe science for the first degree in education: Nevada, Tennessee, Utah (A. B.), Howard, Iowa, and Chicago.

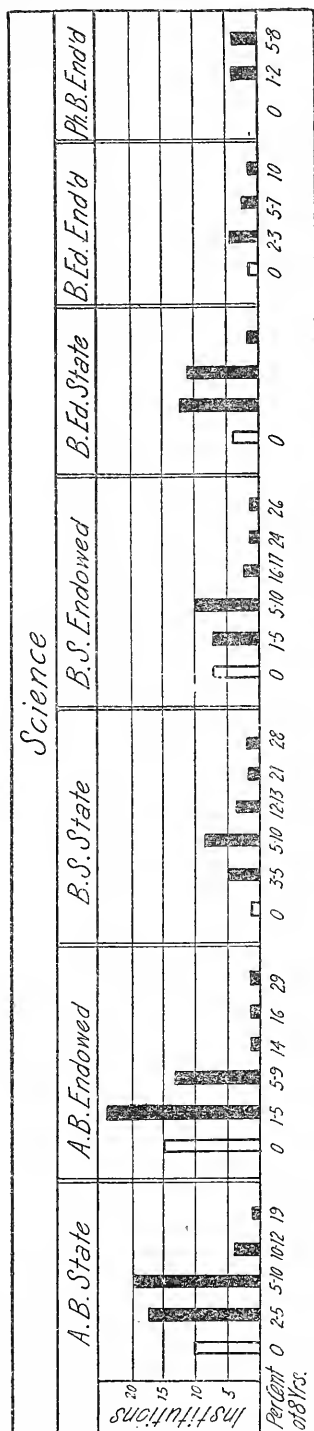
TABLE 58.—*Science.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
41	A. B. (State).....	2.27	19.16	6.32	6.25	6-7
39	A. B. (endowed).....	.81	29.97	5.62	4.23	2-3
22	B. S. (State).....	3.12	28.57	10.49	10	10
21	B. S. (endowed).....	.81	21.66	8.69	5.83	5-6
24	B. Ed. (State).....	2.38	10.45	5.39	5.38	6-7
6	B. Ed. (endowed).....	2.34	10.93	5.31	4.58	.....
0	Ph. B. (State).....	.....	.....	.....	.....	.....
6	Ph. B. (endowed).....	.81	8.42	4.37	3.92	.....
1	Litt. B. (State).....	3.03	.....	.....	.....	.....
1	Litt. B. (endowed).....	3.96	.....	.....	.....	.....
161	General average.....	.....	.....	6.75	.....	.....

The tendencies of the averages in science for the different degrees are toward agreement with the general average, with the marked exception of the B. S. (State), which requires nearly twice the amount usually prescribed. The B. S. (endowed) is also considerably above the average, but does not quite reach the requirements made by the State schools.

Graph 23 shows two distinct tendencies, one in which the requirement is from 1 to 5 per cent, the second from 5 to 9 per cent.





GRAPH 23.

TABLE 59.—Average of entrance and college requirements in social science.

[Per cent of 8 years' work.]

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	State College of Washington.....	1.66
2	University of Missouri.....	2.05
3	Indiana University.....	3.12
4	University of Porto Rico.....	3.13
5	University of Illinois.....	3.25
6	University of Arizona.....	3.33
7	Howard University (D. C.).....	3.33
8	State University of Iowa.....	3.33
9	University of Kansas.....	3.33
10	University of Montana.....	3.33
11	University of Nebraska.....	3.33
12	Cornell University (N. Y.).....	3.33
13	University of Oregon.....	3.33
14	University of Utah.....	3.33
15	University of Maine.....	3.45
16	University of Vermont.....	3.45
17	University of Arkansas.....	3.57
18	University of North Carolina.....	3.57
19	University of Kentucky.....	4.89
20	University of Oklahoma.....	4.97
21	University of Alabama.....	5.00
22	University of Florida.....	5.63
23	University of California.....	5.89
24	University of North Carolina.....	6.07
25	West Virginia University.....	6.55
26	University of Wyoming.....	6.66
27	College of William and Mary.....	7.73
28	Delaware College.....	8.25
29	Ohio State University.....	8.33
30	Ohio University.....	8.33
31	Miami University.....	8.33
32	University of Virginia.....	8.57
33	University of Colorado.....	9.16
34	Howard University (D. C.).....	9.16
35	University of Washington.....	9.16
36	Pennsylvania State College.....	9.24
37	Rutger's College (N. J.).....	9.39
38	University of Texas.....	9.64
39	University of Mississippi.....	10.22
40	University of Idaho.....	10.84
41	University of Georgia.....	11.75
42	Louisiana State University.....	12.39
43	University of New Mexico.....	13.33
44	University of South Carolina.....	15.06

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Union University.....	1.45
2	Tulane University.....	2.34
3	Vanderbilt University.....	2.34
4	Bryn Mawr College.....	2.50
5	Columbia University.....	2.50
6	George Washington University.....	2.50
7	New York University.....	2.50
8	Harvard University.....	3.03
9	De Pauw University.....	3.12
10	Baker University.....	3.33
11	Beloit College.....	3.33
12	Earlham College.....	3.33
13	University of Pittsburgh.....	3.33
14	Trinity College.....	3.33
15	Tufts College.....	3.33
16	Washington University.....	3.33
17	Washington and Lee University.....	3.33
18	Wellesley College.....	3.33
19	Dartmouth College.....	3.44
20	Hamilton College.....	3.44
21	University of Pennsylvania.....	3.44
22	Bowdoin College.....	3.45
23	Wesleyan University.....	3.45
24	Williams College.....	3.45
25	Amherst College.....	3.57
26	University of the South.....	4.41
27	Lafayette College.....	4.61

TABLE 59.—Average of entrance and college requirements in social science—Continued.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
28	Muhlenberg College.....	5.00
29	Colorado College.....	5.83
30	Grinnell College.....	5.83
31	Johns Hopkins University.....	5.85
32	Oberlin College.....	5.87
33	Randolph-Macon College.....	5.91
34	Smith College.....	5.95
35	Vassar College.....	6.06
36	Wells College.....	6.06
37	Swarthmore College.....	6.90
38	Haverford College.....	6.96
39	Catholic University of America (school of sciences).....	7.18
40	George Washington University (group 2, modern language).....	7.50
41	Brown University.....	8.84
42	Union University.....	8.59
43	Catholic University of America (classical group, school of letters).....	9.04
44	Catholic University of America (medical group, school of sciences).....	10.62
45	Catholic University of America (Latin—historical group, school of letters).....	11.02
46	George Washington University (group 4, political and social science).....	12.50
47	Catholic University of America (school of philosophy).....	15.62
48	Catholic University of America (economics group, school of philosophy).....	21.93

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	State College of Washington.....	1.06
2	University of Florida.....	3.13
3	University of Porto Rico.....	3.13
4	University of Illinois.....	3.25
5	University of Arizona.....	3.33
6	University of Nebraska.....	3.33
7	New Hampshire College.....	3.33
8	University of Vermont.....	3.45
9	University of Arkansas.....	3.57
10	University of Virginia.....	3.57
11	University of Kentucky.....	4.89
12	Howard University (D. C.).....	6.06
13	College of William and Mary.....	6.90
14	Delaware College.....	8.25
15	University of Idaho.....	8.33
16	University of Virginia.....	8.57
17	University of Mississippi.....	10.22
18	University of South Carolina.....	15.06
19	Rutgers College (N. J.).....	16.06

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Muhlenberg College.....	1.42
2	University of the South.....	2.21
3	Vanderbilt University.....	2.34
4	Columbia University.....	2.50
5	New York University.....	2.50
6	Harvard University.....	3.03
7	Beloit College.....	3.33
8	Earlham College.....	3.33
9	University of Pittsburgh.....	3.33
10	Syracuse University.....	3.33
11	Tufts College.....	3.33
12	Dartmouth College.....	3.44
13	Hamilton College.....	3.44
14	Bowdoin College.....	3.46
15	Lafayette College.....	3.46
16	Grinnell College.....	5.83
17	Randolph-Macon College.....	5.91
18	Union University.....	6.47
19	Catholic University of America (school of sciences).....	6.90
20	Haverford College.....	6.96
21	Tulane University of Louisiana.....	8.77

TABLE 59.—*Average of entrance and college requirements in social science—Continued.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Percent.
1	University of Mississippi.....	1.53
2	University of Missouri.....	2.08
3	University of Florida.....	3.13
4	Howard University (D. C.).....	3.33
5	State University of Iowa.....	3.33
6	University of Kansas.....	3.33
7	University of Nebraska.....	3.33
8	University of Utah.....	3.33
9	University of Vermont.....	3.45
10	University of Arkansas.....	3.57
11	University of Oklahoma.....	4.90
12	University of Washington.....	5.75
13	University of North Carolina.....	6.07
14	University of Idaho.....	6.66
15	University of Oregon.....	7.08
16	University of New Mexico.....	8.12
17	Ohio State University.....	8.33
18	University of Wyoming.....	9.10
19	University of Colorado.....	9.16
20	University of Texas.....	9.52
21	University of Georgia.....	11.68
22	Louisiana State University.....	12.39
23	Miami University.....	14.16
24	University of South Carolina.....	15.06

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	2.27
2	Columbia University.....	2.50
3	George Washington University.....	4.84
4	John Hopkins University and Goucher College.....	5.00
5	University of Pittsburgh.....	7.23

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.) (Litt. B.).....	9.39
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FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES.

1	Hamilton College (for Ph. B.).....	3.44
2	Lafayette College (for Ph. B.).....	4.61
3	Brown University (for Ph. B.).....	8.44
4	Union University (for Ph. B.).....	10.01
5	Muhlenberg College (for Ph. B.).....	11.18
6	Catholic University of America (for Ph. B.).....	13.02
1	Princeton University (Litt. B.).....	2.83

## SOCIAL SCIENCE.

(History, economics, political science.)

According to Table 59, social science is not prescribed for the A. B. degree either for entrance or for college requirements by six of the State and nine of the endowed institutions of our list, as follows: Michigan, Nevada, South Dakota, Wisconsin, Tennessee, North Dakota, Leland Stanford, Chicago, Yale, Colgate, Washington (St. Louis), Western Reserve, Northwestern, Tulane, and Carleton.

Only five State and five endowed institutions under discussion do not prescribe this subject for the B. S. degree: Hawaii, Alabama, Nevada, North Dakota, Michigan, Chicago, Colgate, Northwestern, Carleton, and Princeton. Likewise five State institutions do not prescribe social science for the first degree in education: Michigan, Nevada, Minnesota, Tennessee, South Dakota, and also Chicago.

TABLE 60.—*Social science.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
44	A. B. (State).....	1.66	15.06	6.49	6.03	3.33-5
48	A. B. (endowed).....	1.45	22.24	5.35	3.51	3.33
19	B. S. (State).....	1.66	16.06	6.14	3.57	3-4
21	B. S. (endowed).....	1.42	8.77	3.90	3.33	3.33
24	B. Ed. (State).....	1.53	15.06	6.59	5.34	3.33
5	B. Ed. (endowed).....	2.27	7.23	4.36	4.84	.....
0	Ph. B. (State).....	.....	.....	.....	.....	.....
6	Ph. B. (endowed).....	3.44	13.02	8.43	9.24	.....
1	Litt. B. (State).....	9.39	.....	.....	.....	.....
0	Litt. B. (endowed).....	.....	.....	.....	.....	.....
168	General average.....	.....	.....	5.82	.....	.....

Social science stands higher than the general average in the following degrees: The A. B. (State), B. S. (State), the B. Ed. (State), and the Ph. B. (endowed). It falls below in the other degrees and especially so in the B. S. (endowed).

Two distinct tendencies are apparent according to Graph 24. The first is a requirement of from 1.66 to 5 per cent; the second, from 5 to 10 per cent.

TABLE 61.—*Average of entrance and college requirements in philosophy and psychology.*

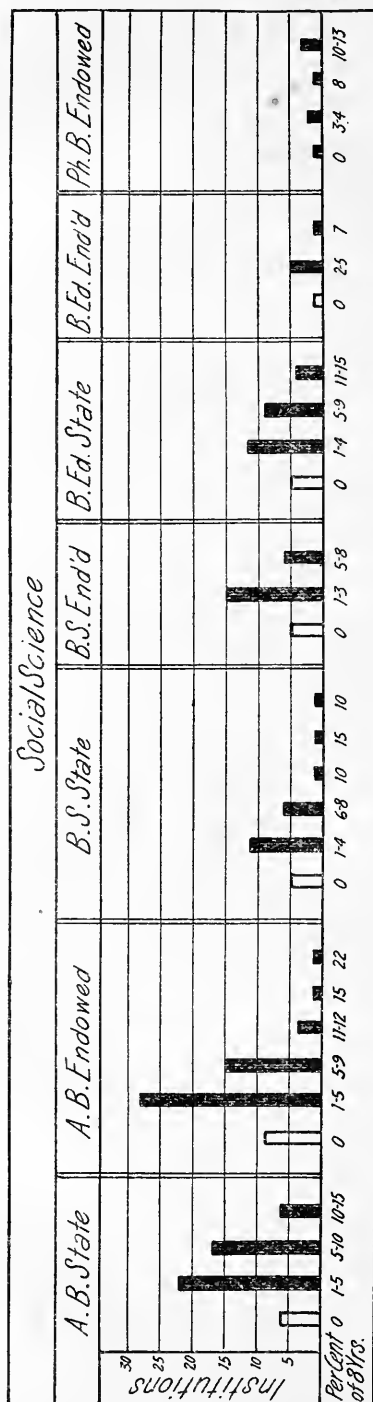
[Per cent of 8 years' work.]

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Mississippi.....	1.53
2	Rutgers College (N. J.).....	2.27
3	Pennsylvania State College.....	2.27
4	University of Kentucky.....	2.34
5	University of Illinois.....	2.43
6	Miami University.....	2.50
7	University of Washington.....	3.33
8	College of William and Mary.....	3.75
9	University of Virginia.....	5.00

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

	Institution.....	Per cent.
1	Hamilton College.....	0.81
2	Carleton College.....	1.25
3	Oberlin College.....	1.27
4	Vassar College.....	1.36
5	Catholic University of America (medical group, school of sciences).....	1.74
6	Catholic University of America (school of sciences).....	1.78
7	Haverford College.....	2.34
8	Randolph-Macon College.....	2.34



GRAPH 21.

TABLE 61.—*Average of entrance and college requirements in philosophy and psychology—Continued.*

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
9	Vanderbilt University.....	2.34
10	Princeton University.....	2.38
11	Johns Hopkins University.....	2.40
12	Columbia University.....	2.50
13	George Washington University.....	2.50
14	Grinnell College.....	2.50
15	New York University.....	2.50
16	Smith College.....	2.50
17	Wellesley College.....	2.51
18	Wells College.....	2.60
19	Bryn Mawr College.....	4.16
20	University of the South.....	4.41
21	Catholic University of America (economics group, school of philosophy).....	5.42
22	Catholic University of America (classical group, school of letters).....	5.97
23	Catholic University of America, (school of philosophy).....	7.88

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Mississippi.....	1.53
2	University of Kentucky.....	2.34
3	College of William and Mary.....	2.50
4	Rutgers College (N. J.).....	4.54
5	University of Virginia.....	5.00

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College.....	0.81
2	Carleton College.....	1.25
3	Catholic University of America.....	1.73
4	Muhlenberg College.....	2.14
5	Traverford College.....	2.31
6	Randolph-Macon College.....	2.34
7	Vanderbilt University.....	2.34
8	Princeton University.....	2.38
9	Columbia University.....	2.50
10	Grinnell College.....	2.50
11	New York University.....	2.50
12	University of the South.....	4.42

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of South Carolina.....	1.08
2	University of Oregon.....	1.25
3	University of Utah.....	1.25
4	University of Oklahoma.....	1.56
5	University of Washington.....	1.61
6	University of Georgia.....	2.27
7	University of Vermont.....	2.38
8	University of Nebraska.....	2.48
9	University of Florida.....	2.50
10	State University of Iowa.....	2.50
11	University of Minnesota.....	2.50
12	Ohio State University.....	2.50
13	University of New Mexico.....	3.51
14	University of Tennessee.....	3.75
15	University of Mississippi.....	3.84

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	1.56
2	George Washington University.....	4.82

TABLE 61.—*Average of entrance and college requirements in philosophy and psychology—Continued.*

## FOR LITT. B. FROM STATE UNIVERSITIES.

	Institution.	Per cent.
1	Rutgers College (N. J.) (Litt. B.) .....	4.54

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College (Ph. B.) .....	0.81
2	Muhlenberg College (Ph. B.) .....	2.14
3	Brown University (Ph. B.) .....	2.50
4	Catholic University of America (Ph. B.) .....	12.16
1	Princeton University (Litt. B.) .....	2.38

TABLE 62.—*Average of entrance and college requirements in Bible or religion.*

## FOR A. B. FROM STATE UNIVERSITIES.

	Institution.	Per cent.
1	University of New Jersey (Rutgers) .....	0.75

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Western Reserve University .....	0.82
2	Beloit College .....	.83
3	Haverford College .....	1.17
4	Swarthmore College .....	1.21
5	University of the South .....	1.47
6	Goucher College .....	1.66
7	Oberlin College .....	1.69
8	Wells College .....	1.73
9	Catholic University of America (medical group, school of sciences) .....	2.32
10	Randolph-Macon College .....	2.34
11	Catholic University of America (school of sciences) .....	2.38
12	Catholic University of America (economics group, school of philosophy) .....	2.40
13	Smith College .....	2.50
14	Wellesley College .....	2.54
15	Catholic University of America (school of philosophy) .....	2.62
16	Lafayette College .....	3.07
17	Trinity College (N. C.) .....	3.12
18	Muhlenberg College .....	5.00
19	Catholic University of America (school of letters) .....	2.63

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Haverford College .....	1.17
2	University of the South .....	1.47
3	Randolph-Macon College .....	2.34
4	Catholic University of America .....	2.31
5	Hamilton College .....	2.42
6	Lafayette College .....	2.98
7	Muhlenberg College .....	5.00

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Hamilton College (Ph. B.) .....	2.42
2	Catholic University of America (Ph. B.) .....	2.63
3	Lafayette College (Ph. B.) .....	3.07
4	Muhlenberg College (Ph. B.) .....	5.00

## FOR LITT. B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.) (Litt. B.) .....	0.75
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TABLE 63.—*Average of entrance and college requirements in education*—Continued.

## EDUCATION.

## FOR A. B. FROM STATE UNIVERSITIES.

	Institution.	Per cent.
1	Pennsylvania State College.....	1.14

## FOR A. B. FROM NON-STATE UNIVERSITIES.

1	Catholic University of America (school of philosophy).....	1.96
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Idaho.....	2.91
2	University of Michigan.....	4.58
3	State University of Iowa.....	5.83
4	University of Mississippi.....	6.15
5	University of Nebraska.....	6.20
6	University of Minnesota.....	6.25
7	University of Oregon.....	7.08
8	University of Nevada.....	7.50
9	University of Tennessee.....	7.50
10	University of Vermont.....	7.54
11	University of Oklahoma.....	7.81
12	University of North Dakota.....	8.20
13	Louisiana State University.....	8.82
14	University of Kansas.....	9.08
15	University of Georgia.....	9.09
16	Ohio State University.....	9.16
17	University of Utah.....	9.16
18	University of Texas.....	9.52
19	University of Washington.....	9.67
20	University of Colorado.....	10
21	University of Missouri.....	10
22	University of Wyoming.....	10.57
23	University of South Carolina.....	10.87
24	Howard University.....	11.91
25	University of Alabama.....	12.50
26	University of Arkansas.....	12.75
27	Miami University.....	14.16
28	University of Florida.....	15.00
29	University of North Carolina.....	16.66

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	George Washington University.....	8.06
2	University of Chicago.....	9.75
3	University of Pittsburgh.....	14.83
4	Columbia University.....	18.75

## FOR PH. B. FROM NON-STATE UNIVERSITIES.

1	Catholic University of America.....	1.97
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TABLE 64.—Average of entrance and college requirements in miscellaneous subjects—Continued.

## HYGIENE.

## FOR A. B. FROM STATE UNIVERSITIES.

	Institution.	Per cent.
1	University of California.....	0.85

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Syracuse University.....	0.41
2	Wells College.....	.44
3	Wesleyan University.....	.83
4	Smith College.....	1.66
5	Wellesley College.....	1.69
6	Washington and Lee University.....	2.38

## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Syracuse University.....	0.41
2	Wesleyan University.....	.83

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Columbia University.....	0.83
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## BIBLIOGRAPHY.

## FOR A. B. FROM STATE UNIVERSITIES.

1	Pennsylvania State College.....	0.38
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## MATRICULATION LECTURES, ETC.

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of North Dakota.....	0.41
2	University of Washington.....	.41

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of North Dakota.....	0.41
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of North Dakota.....	0.41
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TABLE 64.—Average of entrance and college requirements in miscellaneous subjects—Continued.

## PUBLIC SPEAKING, ORATORY, ETC.

## FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Vermont.....	1.58

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Johns Hopkins University.....	.40
2	Wells College.....	.44
3	Syracuse University.....	.83
4	Wesleyan University.....	.83

## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont.....	1.51
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## FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Wesleyan University.....	.83
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of Vermont.....	1.58
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## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES.

1	University of Pittsburgh.....	1.56
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## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES.

1	University of Vermont.....	1.58
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## ART.

## FOR A. B. FROM STATE UNIVERSITIES.

1	Pennsylvania State College.....	
2	Rutgers College (N. J.).....	

## FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Oberlin College.....	.85
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## FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutgers College (N. J.).....	.75
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## FOR LITT B. FROM STATE UNIVERSITIES.

1	Rutgers College (N. J.).....	.75
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TABLE 64.—*Average of entrance and college requirements in miscellaneous subjects—Continued.*

## DRAFTING, DRAWING, ETC.

FOR B. S. FROM STATE UNIVERSITIES.

	Institution.	Per cent.
1	Rutgers College (N. J.).....	1.51
2	College of Hawaii.....	1.57

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	0.71
2	Wesleyan University.....	.83
3	Lafayette College.....	1.49
4	Catholic University of America (school of sciences).....	3.17

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (medical group, school of sciences).....	1.74
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## MECHANICS.

FOR B. S. FROM NON-STATE UNIVERSITIES.

1	Catholic University of America.....	1.73
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## LIBRARY METHODS.

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES.

1	University of Oregon.....	0.83
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## PHILOSOPHY AND PSYCHOLOGY.

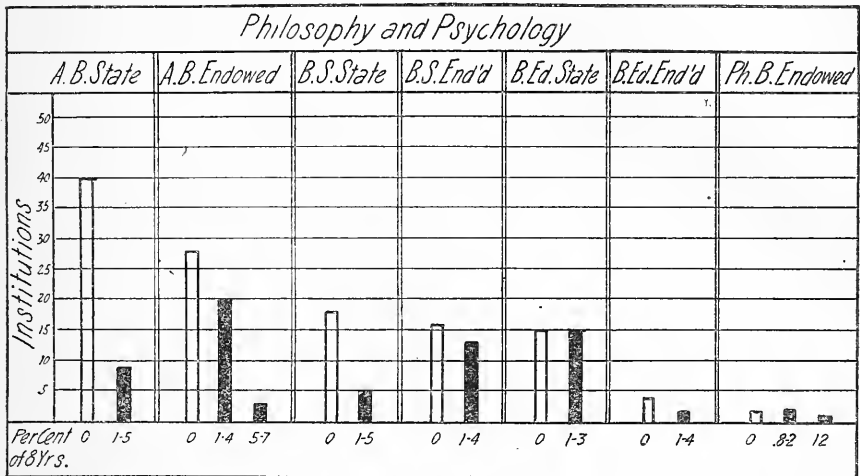
Philosophy and psychology, as well as Bible and education, are only prescribed for the 4-year period of college. (See Chapter III.) The accompanying tables and graphs, however, show the general relation of these subjects to the eight-year period. (See Table 61.)

TABLE 65.—*Philosophy and psychology.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
9	A. B. (State).....	1.53	5.00	2.82	2.43	2-3
23	A. B. (endowed).....	.81	7.86	2.85	2.50	2.50
5	B. S. (State).....	1.53	5.00	3.18	2.50	.....
12	B. S. (endowed).....	.81	4.42	2.27	2.34	2-3
15	B. Ed. (State).....	1.08	3.84	2.33	2.48	2-3
2	B. Ed. (endowed).....	1.56	4.82	3.19	3.19	.....
4	Ph. B. (State).....	.81	12.16	4.40	2.32	.....
0	Ph. B. (endowed).....	.....	.....	.....	.....	.....
1	Litt. B. (State).....	4.54	.....	.....	.....	.....
1	Litt. B. (endowed).....	2.38	.....	.....	.....	.....
72	General average.....	.....	.....	2.77	.....	.....

The average, median, and mode for the different degrees show that the tendency with respect to these subjects is from 2 to 3 per cent of the total requirements (eight years).

The highest averages are those of the B. S. (endowed), the B. Ed. (endowed), and the Ph. B. (endowed). These exceed the general average. The B. S. (endowed) and the B. Ed. (State) fall somewhat below the average.



GRAPH 25.

TABLE 66.—*Bible.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
1	A. B. (State).....	0.75				
18	A. B. (endowed).....	.82	5.00	2.16	2.50	
7	B. S. (endowed).....	1.17	5.00	2.52	2.31	
4	Ph. B. (endowed).....	2.42	5.00	3.28		
1	Litt. B. (State).....	.75				
31	General average.....			2.29		

The average for the eight-year period is very low in both the A. B. and B. S. degrees.

TABLE 67.—*Education.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
1	A. B. (State).....	1.14				
1	A. B. (endowed).....	1.96				
30	B. Ed. (State).....	2.91	16.66	9.19	9.09	
5	B. Ed. (endowed).....	8.06	19.75	12.89	12.29	
1	Ph. B. (endowed).....	1.97				
36	General average.....			8.97		



TABLE 68.—Average of total prescribed entrance and graduation requirements—Contd.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
43	University of Alabama.....	61.30
44	College of William and Mary.....	61.67
45	University of North Carolina (group 3).....	62.72
46	University of Vermont.....	63.17
47	University of North Carolina (group 1).....	64.39
48	University of North Carolina (group 2).....	66.06
49	Pennsylvania State College.....	67.12
50	University of Georgia.....	71.55
51	Delaware College.....	71.64
52	Rutgers College (N. J.).....	76.19
53	University of Virginia.....	77.50

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	27.02
2	Colgate University.....	37.51
3	Western Reserve University.....	39.06
4	Northwestern University.....	39.16
5	Tufts College.....	39.16
6	Harvard University.....	39.37
7	Wesleyan University.....	39.43
8	Beloit College.....	40
9	Carleton College.....	40.41
10	Swarthmore College.....	40.79
11	Earlham College.....	40.83
12	Bowdoin College.....	41.58
13	University of Pennsylvania.....	44.22
14	De Pauw University.....	45.57
15	Yale University.....	45.72
16	Washington and Lee University.....	47.37
17	George Washington University (group 3).....	50
18	Wellesley College.....	51.06
19	Tulane University.....	51.86
20	Baker University.....	52.50
21	George Washington University (groups 1, 2, 4).....	52.50
22	Tulane University.....	52.65
23	Smith College.....	52.87
24	Dartmouth College.....	53.06
25	Princeton University.....	53.09
26	Columbia University.....	53.33
27	Trinity College (N. C.).....	53.85
28	Washington University (St. Louis).....	54.16
29	Oberlin College.....	55.22
30	University of Chicago.....	56.20
31	Syracuse University.....	56.25
32	Amherst College.....	56.63
33	Vanderbilt University.....	57.80
34	Trinity College (N. C.).....	58.16
35	Haverford College.....	58.81
36	George Washington University (group 5, medical).....	59.16
37	Grinnell College.....	59.16
38	Williams College.....	59.44
39	Colorado College.....	60.82
40	New York University.....	60.83
41	Vassar College.....	64.39
42	Brown University.....	67.11
43	Wells College.....	68.30
44	Johns Hopkins University.....	68.80
45	University of the South.....	68.83
46	Union University.....	70
47	Bryn Mawr College.....	70.82
48	Lafayette College.....	71.14
49	Union University.....	72.12
50	Hamilton College.....	73.68
51	Catholic University of America (school of sciences).....	75.50
52	Randolph-Macon College.....	75.87
53	Muhlenburg College.....	83.56
54	Catholic University of America (economics group, school of philosophy).....	86.75
55	Catholic University of America (school of philosophy).....	89.75
56	Catholic University of America (modern languages group, school of letters; and medical group, school of sciences).....	90.10
57	Catholic University of America (school of letters).....	92.10

TABLE 68.—Average of total prescribed entrance and graduation requirements—Contd.

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Nevada.....	21.66
2	New Hampshire College.....	25.00
3	College of Hawaii.....	25.62
4	University of North Dakota.....	28.84
5	University of Nebraska.....	31.65
6	State College of Washington.....	36.66
7	University of Florida.....	41.25
8	University of Illinois.....	44.05
9	University of Porto Rico.....	44.12
10	University of Alabama.....	48.92
11	University of Mississippi.....	49.84
12	University of Arizona.....	52.49
13	University of Idaho.....	55.00
14	University of South Carolina.....	55.27
15	University of Vermont.....	56.94
16	Delaware College.....	57.36
17	Howard University (D. C.).....	59.16
18	University of Arkansas.....	60.15
19	University of Kentucky.....	61.73
20	University of Virginia (special subject).....	62.50
21	College of William and Mary.....	67.25
22	University of Virginia.....	77.50
23	Rutgers College (N. J.).....	80.28

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Pittsburgh.....	27.02
2	Carleton College.....	35.41
3	Tufts College.....	36.66
4	Beloit College.....	40
5	Earlham College.....	40.83
6	Bowdoin College.....	41.07
7	Harvard University.....	41.36
8	Colgate University.....	43.03
9	Princeton University.....	45.45
10	Wesleyan University.....	45.98
11	Dartmouth College.....	46.17
12	Columbia University.....	46.24
13	Grinnell College.....	50.83
14	Lafayette College.....	52.53
15	Syracuse University.....	52.91
16	Northwestern University.....	53.33
17	New York University.....	55
18	Vanderbilt University.....	55.19
19	University of Chicago.....	57.85
20	Haverford College.....	58.81
21	Union University.....	63.97
22	Randolph-Macon College.....	64.83
23	Tulane University.....	68.87
24	Hamilton College.....	70.24
25	University of the South.....	70.25
26	Muhlenberg College.....	76.66
27	Catholic University of America (school of sciences).....	78.60

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Nevada.....	29.16
2	University of Utah.....	32.91
3	University of Arkansas.....	32.98
4	University of Michigan.....	33.73
5	University of Utah.....	37.50
6	University of North Dakota.....	39.14
7	University of Nebraska.....	40.33
8	University of Mississippi.....	43.00
9	State University of Iowa.....	44.15
10	University of Missouri.....	44.16
11	University of Oregon.....	44.16
12	University of Idaho.....	44.55
13	University of Minnesota.....	46.25
14	University of New Mexico.....	48.33
15	University of Washington.....	49.34
16	University of Oklahoma.....	50.30



TABLE 68.—*Average of total prescribed entrance and graduation requirements—Contd.*

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
17	University of Wyoming.....	51.21
18	University of Florida.....	53.75
19	University of Tennessee.....	57.67
20	University of Colorado.....	58.30
21	University of Kansas.....	58.77
22	Louisiana State University.....	65.62
23	University of Texas.....	66.06
24	Ohio State University.....	67.50
25	Howard University (D. C.).....	68.56
26	University of South Carolina.....	69.39
27	University of Alabama.....	69.34
28	University of Georgia.....	72.51
29	Miami University.....	78.33
30	University of North Carolina.....	81.06
31	University of Vermont.....	84.39

FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	University of Chicago.....	22.50
2	Johns Hopkins University and Goucher College.....	56.83
3	George Washington University.....	52.40
4	University of Pittsburgh.....	55.99
5	Tulane University.....	83.33

FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	56.64
1	Rutgers College (N. J.) (for Litt. B.).....	76.19

FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Chicago University (for Ph. B.).....	12.74
2	Brown University (for Ph. B.).....	53.55
3	Lafayette College (for Ph. B.).....	65.40
4	Hamilton College (for Ph. B.).....	70.24
5	Union University (for Ph. B.).....	74.29
6	Muhlenberg College (for Ph. B.).....	79.75
7	Catholic University of America (for Ph. B.).....	91.75
1	Princeton University (for Litt. B.).....	45.45

TABLE 69.—*Total prescribed entrance and college requirements.*

Num- ber of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
53	A. B. (State).....	21.66	77.50	48.01	47.36	48
57	A. B. (endowed).....	27.02	92.10	57.34	55.22	
23	B. S. (State).....	21.66	80.28	49.71	52.49	
27	B. S. (endowed).....	27.02	78.60	52.55	52.91	
31	B. (Ed.) (State).....	29.16	84.99	53.61	50.30	
5	B. (Ed.) (endowed).....	22.50	83.33	53.00	52.40	
1	Ph. B. (State).....	56.64				
7	Ph. B. (endowed).....	12.74	91.75	63.96	70.24	
1	Litt. B. (State).....	76.19				
1	Litt. B. (endowed).....	45.45				
206	General average.....			53.05		

## TOTAL PRESCRIBED ENTRANCE AND COLLEGE REQUIREMENTS.

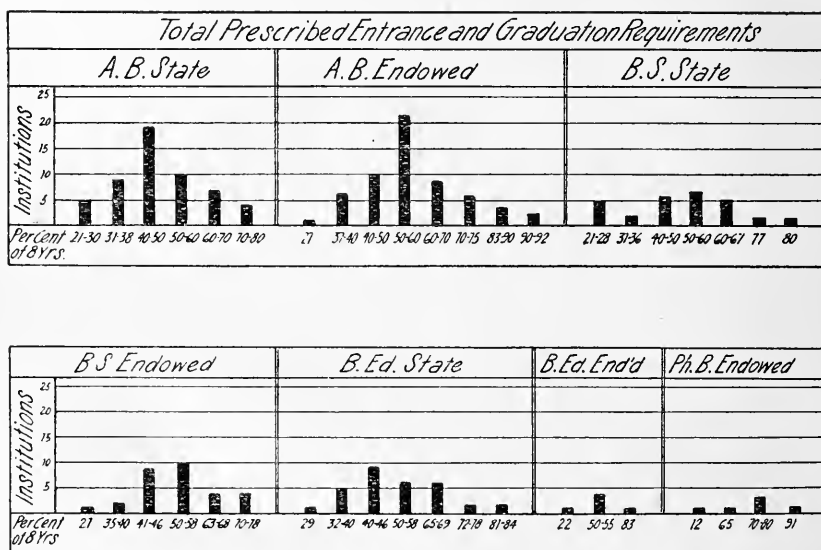
The total prescribed entrance and college requirements vary from 12.74 to 92.10 per cent of the eight-year period. (See Table 69).

The minimum requirements for the A. B. (State) is 21.66 per cent, Nevada; the average 48.01; the median, 47.36, which falls between Tennessee and California (Plan A); the maximum 77.50, Virginia. For the A. B. (endowed) the minimum is 27.02 per cent, Pittsburgh; the average is 57.34; the median 55.22, Oberlin; the maximum 92.10, the Catholic University of America.

For the B. S. (State) the minimum is 21.66 per cent, Nevada; the average 49.71; the median 52.49, Arizona; the maximum 80.28, Rutgers. For the B. S. (endowed) the minimum is 27.02 per cent, Pittsburgh; the average 52.55; the median 52.91, Syracuse; the maximum 78.60, the Catholic University of America.

For the B. Ed. (State) the minimum is 29.16 per cent, Nevada; the average 53.61; the median 50.30, Oklahoma; the maximum 84.99, Vermont. For the B. Ed. (endowed) the minimum is 22.50, Chicago; the average 53.00; the median 52.40, George Washington; the maximum 83.33, Tulane.

According to Graph 27, the most numerous groups are those which indicate from 40 to 50 per cent and from 50 to 60 per cent of prescribed work.



GRAPH 27.

TABLE 70.—General averages.

Degree.	Number of cases.	English.	Number of cases.	Foreign lan- guage.	Number of cases.	Mathematics.	Number of cases.	Science.	Number of cases.	Social science.	Number of cases.	Philosophy and psychology.	Number of cases.	Bible.	Number of cases.	Education.	Number of cases.	Prescribed.	Number of cases.	Elective.
A. B. (State).....	50	13.12	52	15.55	49	8.59	41	6.32	44	6.40	9	2.52	1	.75	1	1.14	53	48.01	52	51.16
A. B. (endowed).....	54	13.53	59	23.33	53	10.24	39	5.62	48	5.35	23	2.85	18	2.16	1	1.96	57	57.34	57	42.67
A. B. (State).....	25	13.74	22	10.11	22	10.40	22	10.49	19	6.14	5	3.18	7	2.52	1	.....	23	49.71	23	50.28
B. S. (endowed).....	27	12.96	26	15.73	28	11.36	21	8.69	21	3.90	12	2.27	.....	.....	.....	.....	27	52.55	27	47.54
B. Ed. (State).....	30	13.65	28	13.01	29	8.19	24	5.39	24	6.59	15	2.33	.....	.....	29	9.19	31	53.61	31	46.34
B. Ed. (endowed).....	6	13.39	5	11.35	4	8.85	6	5.31	5	4.36	2	3.19	.....	.....	5	12.89	5	53.00	5	50.99
Ph. B. (State).....	1	.....	1	.....	1	.....	1	.....	1	.....	4	4.40	.....	.....	.....	.....	1	56.64	1	43.46
Ph. B. (endowed).....	7	15.25	6	27.59	6	10.87	6	4.37	6	8.43	.....	.....	.....	.....	1	1.97	7	63.96	7	36.03
Litt. B. (State).....	1	.....	1	.....	1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	1	76.19	1	23.81
Litt. B. (endowed).....	1	.....	1	.....	1	.....	1	.....	.....	.....	.....	.....	.....	.....	.....	.....	1	43.45	1	44.55
General average.....	203	13.46	201	17.26	194	9.66	161	6.75	168	5.82	72	2.77	31	2.29	36	8.97	206	53.05	205	46.77

*Summary of total prescribed entrance and college work.*

## A. B. (STATE).

- 4 prescribe from 21.66 to 29.16 per cent.
- 9 prescribe from 31.65 to 38.55 per cent.
- 19 prescribe from 41.25 to 49.84 per cent.
- 10 prescribe from 50.82 to 58.33 per cent.
- 7 prescribe from 61.30 to 67.12 per cent.
- 4 prescribe from 71.55 to 77.50 per cent.

## B. S. (STATE).

- 4 prescribe from 21.66 to 28.48 per cent.
- 2 prescribe from 31.65 to 36.66 per cent.
- 5 prescribe from 41.25 to 49.84 per cent.
- 6 prescribe from 52.49 to 59.16 per cent.
- 4 prescribe from 60.15 to 67.25 per cent.
- 1 prescribes 77.50 per cent.
- 1 prescribes 80.28 per cent.

## B. ED., ETC. (STATE).

- 1 prescribes 29.16 per cent.
- 5 prescribe from 32.91 to 29.14 per cent.
- 9 prescribe from 40.83 to 46.17 per cent.
- 6 prescribe from 50.30 to 58.77 per cent.
- 6 prescribe from 65.62 to 69.64 per cent.
- 2 prescribe from 72.51 to 78.33 per cent.
- 2 prescribe from 81.06 to 84.99 per cent.

## PH. B. (STATE).

- 1 prescribes 56.64 per cent.

## LITT. B. (STATE).

- 1 prescribes 76.19 per cent.

## A. B. (ENDOWED).

- 1 prescribes 27.02 per cent.
- 6 prescribe from 37.51 to 40 per cent.
- 10 prescribe from 40.41 to 50 per cent.
- 21 prescribe from 51.06 to 59.44 per cent.
- 8 prescribe from 60.82 to 70 per cent.
- 6 prescribe from 70.82 to 75.87 per cent.
- 3 prescribe from 83.56 to 89.75 per cent.
- 2 prescribe from 90.10 to 92.10 per cent.

## B. S. (ENDOWED).

- 1 prescribes 27.02 per cent.
- 2 prescribe from 35.41 to 40 per cent.
- 8 prescribe from 41.07 to 46.24 per cent.
- 9 prescribe from 50.83 to 58.81 per cent.
- 4 prescribe from 63.33 to 68.87 per cent.
- 4 prescribe from 70.24 to 78.60 per cent.

## B. ED., ETC. (ENDOWED)

- 1 prescribes 22.50 per cent.
- 4 prescribe from 50.83 to 55.90 per cent.
- 1 prescribes 83.33 per cent.

## PH. B. (ENDOWED).

- 1 prescribes 12.74 per cent.
- 1 prescribes 65.40 per cent.
- 3 prescribe from 70.24 to 79.75 per cent.
- 1 prescribes 91.75 per cent.

## LITT. B. (ENDOWED).

- 1 prescribes 45.45 per cent.

TABLE 71.—*Average of total elective entrance and college graduation requirements.*

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Per cent.
1	University of Virginia.....	22.50
2	Rutgers College (N. J.).....	23.81
3	Delaware College.....	28.36
4	University of Georgia.....	28.45
5	College of William and Mary.....	32.75
6	Pennsylvania State College.....	32.88
7	University of North Carolina (group 2).....	33.94
8	University of North Carolina (group 1).....	35.61
9	University of Vermont.....	36.83
10	University of North Carolina (group 3).....	37.28
11	University of Alabama.....	38.69
12	Ohio University.....	41.67
13	Ohio State University.....	42.50
14	University of Texas.....	42.50
15	University of Washington.....	42.92

TABLE 71.—Average of total elective entrance and college graduation requirements—Con.

FOR A. B. FROM STATE UNIVERSITIES AND COLLEGES—continued.

	Institutions.	Per cent.
16	Louisiana State University.....	43.20
17	University of South Carolina.....	44.73
18	Howard University (D. C.).....	45
19	University of Idaho.....	46.66
20	University of New Mexico.....	49.17
21	University of Kansas.....	49.18
22	University of Mississippi.....	50.16
23	Miami University.....	50.83
24	West Virginia University.....	51.46
25	University of Kentucky.....	51.54
26	University of Arizona.....	51.67
27	University of Colorado.....	51.67
28	University of California (group A).....	51.70
29	University of Tennessee.....	53.58
30	University of California (group B).....	53.75
31	University of Minnesota.....	53.75
32	University of Wisconsin.....	55.13
33	Howard University (D. C.).....	55.64
34	University of Porto Rico.....	53.88
35	University of Montana.....	56.67
36	University of Illinois.....	57.08
37	University of Maine.....	57.25
38	Cornell University (N. Y.).....	58.34
39	University of Oklahoma.....	58.55
40	University of Florida.....	58.75
41	Indiana University.....	61.45
42	State College of Washington.....	63.34
43	State University of Iowa.....	64.18
44	University of Wyoming.....	64.24
45	University of Utah.....	64.69
46	University of Arkansas.....	65.50
47	University of Missouri.....	66.08
48	University of Nebraska.....	68.35
49	University of Michigan.....	70.84
50	University of North Dakota.....	71.52
51	University of South Dakota.....	76.31
52	University of Nevada.....	78.34

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (school of letters).....	7.90
2	Catholic University of America (modern language group, school of letters).....	9.90
3	Catholic University of America (school of philosophy).....	10.25
4	Catholic University of America (economics group, school of philosophy).....	13.25
5	Muhlenberg College.....	16.44
6	Randolph-Macon College.....	42.13
7	Catholic University of America (school of sciences).....	24.40
8	Hamilton College.....	26.32
9	Union University.....	27.88
10	Lafayette College.....	28.86
11	Bryn Mawr College.....	29.18
12	Union University.....	30
13	University of the South.....	31.17
14	Johns Hopkins University.....	31.20
15	Wells College.....	31.70
16	New York University.....	39.17
17	Brown University.....	32.89
18	Vassar College.....	35.60
19	Colorado College.....	39.17
20	Williams College.....	40.56
21	George Washington University (group 5, medical).....	40.84
22	Haverford College.....	41.19
23	Grinnell College.....	41.84
24	Trinity College.....	41.84
25	Vanderbilt University.....	42.15
26	Amherst College.....	43.37
27	Syracuse University.....	43.75
28	University of Chicago.....	43.80
29	Oberlin College.....	44.78
30	Washington University (St. Louis).....	45.84
31	Trinity College (N. C.).....	46.15
32	Columbia University.....	46.66
33	Princeton University.....	46.91
34	Dartmouth College.....	46.92
35	Smith College.....	47.13
36	Tulane University.....	47.35
37	Baker University.....	47.50

TABLE 71.—Average of total elective entrance and college graduation requirements—Con.

FOR A. B. FROM NON-STATE UNIVERSITIES AND COLLEGES—continued.

	Institution.	Per cent.
38	George Washington University (groups 1, 2, 4).....	47.50
39	Tulane University.....	48.14
40	Wellesley College.....	48.94
41	George Washington University (group 3).....	50
42	Washington and Lee University.....	52.63
43	Yale University.....	54.28
44	DePauw University.....	54.49
45	University of Pennsylvania.....	55.78
46	Harvard University.....	57.66
47	Bowdoin College.....	58.42
48	Earlham College.....	59.17
49	Swarthmore College.....	59.21
50	Carleton College.....	59.59
51	Beloit College.....	60
52	Wesleyan University.....	60.57
53	Northwestern University.....	60.84
54	Western Reserve University.....	60.94
55	Tufts College.....	61.83
56	Colgate University.....	62.49
57	University of Pittsburgh.....	72.97

FOR B. S. FROM STATE UNIVERSITIES AND COLLEGES.

1	Rutger's College (N. J.).....	19.72
2	University of Virginia.....	22.50
3	College of William and Mary.....	32.75
4	University of Virginia (special subject).....	37.50
5	University of Kentucky.....	38.26
6	University of Arkansas.....	39.84
7	Howard University (D. C.).....	40.84
8	Delaware College.....	42.64
9	University of Vermont.....	43.06
10	University of South Carolina.....	44.73
11	University of Idaho.....	45
12	University of Arizona.....	47.51
13	University of Mississippi.....	50.16
14	University of Alabama.....	51.07
15	University of Porto Rico.....	55.88
16	University of Illinois.....	55.94
17	University of Florida.....	58.75
18	State College of Washington.....	63.33
19	University of Nebraska.....	68.55
20	University of North Dakota.....	71.52
21	College of Hawaii.....	74.37
22	New Hampshire College.....	74.40
23	University of Nevada.....	78.34

FOR B. S. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America.....	21.40
2	Muhlenberg College.....	23.34
3	University of the South.....	29.75
4	Hamilton College.....	29.76
5	Tulane University.....	31.13
6	Randolph-Macon College.....	35.17
7	Union University.....	36.03
8	Haverford College.....	41.19
9	Princeton University.....	44.55
10	Vanderbilt University.....	44.81
11	New York University.....	45
12	Northwestern University.....	46.67
13	Syracuse University.....	47.69
14	Lafayette College.....	47.47
15	Grinnell College.....	49.17
16	Columbia University.....	53.76
17	Dartmouth College.....	53.82
18	Wesleyan University.....	54.02
19	University of Chicago.....	54.51
20	Colgate University.....	56.97
21	Bowdoin College.....	58.93
22	Earlham College.....	59.17
23	Beloit College.....	60
24	Harvard University.....	60.69
25	Tufts College.....	63.33
26	Carleton College.....	64.54
27	University of Pittsburgh.....	72.97

TABLE 71.—Average of total elective entrance and college graduation requirements—Con.

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM STATE UNIVERSITIES AND COLLEGES.

	Institution.	Percent.
1	University of Vermont.....	15.01
2	University of North Carolina.....	18.94
3	Miami University.....	21.67
4	University of Georgia.....	27.46
5	University of Alabama.....	30.36
6	University of South Carolina.....	30.61
7	Howard University.....	31.44
8	Ohio State University.....	32.50
9	University of Texas.....	33.94
10	Louisiana State University.....	34.38
11	University of Kansas.....	41.23
12	University of Colorado.....	41.70
13	University of Tennessee.....	42.33
14	University of Florida.....	46.25
15	University of Wyoming.....	48.79
16	University of Oklahoma.....	49.70
17	University of Washington.....	50.66
18	University of New Mexico.....	51.67
19	University of Minnesota.....	53.75
20	University of Idaho.....	55.42
21	State University of Iowa.....	55.84
22	University of Missouri.....	55.84
23	University of Oregon.....	55.89
24	University of Mississippi.....	57
25	University of Nebraska.....	59.67
26	University of North Dakota.....	60.86
27	University of Utah.....	62.50
28	University of Michigan.....	66.27
29	University of Arkansas.....	67.02
30	University of Utah.....	67.09
31	University of Nevada.....	70.84

## FOR THE BACHELOR'S DEGREE IN EDUCATION FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Tulane University.....	36.66
2	University of Pittsburgh.....	44.05
3	George Washington University.....	47.60
4	Johns Hopkins University and Goucher College.....	49.16
5	University of Chicago.....	77.50

## FOR PH. B. AND LITT. B. FROM STATE UNIVERSITIES AND COLLEGES.

1	University of Vermont (for Ph. B.).....	43.46
1	Rutgers College (N. J.) (for Litt. B.).....	23.81

## FOR PH. B. AND LITT. B. FROM NON-STATE UNIVERSITIES AND COLLEGES.

1	Catholic University of America (for Ph. B.).....	8.25
2	Muhlenberg College (for Ph. B.).....	20.25
3	Union University (for Ph. B.).....	25.71
4	Hamilton College (for Ph. B.).....	29.76
5	Lafayette College (for Ph. B.).....	34.6
6	Brown University (for Ph. B.).....	46.45
7	University of Chicago (for Ph. B.).....	87.26
1	Princeton University (for Litt. B.).....	44.55

**TOTAL ELECTIVE ENTRANCE AND COLLEGE REQUIREMENTS.**

The total elective entrance and college requirements, according to Table 71, vary from 22.50 per cent to 78.34 per cent for the A. B. degree of the State schools; for the endowed schools it varies from 7.90 per cent to 72.97 per cent. See Table 72 for the variations in the standards of the other degrees.

TABLE 72.—*Total elective entrance and college requirements.*

Number of cases.	Degree.	Minimum.	Maximum.	Average.	Median.	Mode.
52.....	A. B. (State).....	22.50	78.34	51.16	51.60	.....
57.....	A. B. (endowed).....	7.90	72.97	42.67	44.78	.....
23.....	B. S. (State).....	19.72	78.34	50.28	47.51	.....
27.....	B. S. (endowed).....	21.40	72.97	47.54	47.69	.....
31.....	B. Ed. (State).....	15.01	70.84	46.34	49.70	.....
5.....	B. Ed. (endowed).....	36.66	77.50	50.99	47.60	.....
1.....	Ph. B. (State).....	43.46	.....	.....	.....	.....
7.....	Ph. B. (endowed).....	8.25	87.26	36.03	29.76	.....
1.....	Litt. B. (State).....	23.81	.....	.....	.....	.....
1.....	Litt. B. (endowed).....	44.55	.....	.....	.....	.....
205.....	General average.....	.....	.....	46.77	.....	.....

Table 72 shows the average per cent of electives, including both entrance and college work, during the eight-year period. The amount of electives for the A. B. and B. S. degrees of the State schools exceeds the electives of the endowed schools with the exceptions of the B. Ed. (endowed).

According to Graph 28 there are two tendencies which are nearly the same—that is, the schools of our list tend to offer electives of from 40 to 50 per cent and from 50 to 60 per cent of the total requirements.

*Summary of total elective entrance and college work.***A. B. (STATE).**

4 elect from 23.50 to 28.45 per cent.  
 7 elect from 32.88 to 38.69 per cent.  
 10 elect from 41.67 to 49.18 per cent.  
 19 elect from 50.16 to 58.75 per cent.  
 8 elect from 61.45 to 68.35 per cent.  
 4 elect from 70.84 to 78.34 per cent.

**B. S. (STATE).**

1 elects 19.72 per cent.  
 1 elects 22.50 per cent.  
 4 elect from 32.75 to 39.84 per cent.  
 6 elect from 40.84 to 47.51 per cent.  
 5 elect from 50.16 to 58.75 per cent.  
 2 elect from 63.33 to 68.55 per cent.  
 4 elect from 71.52 to 78.34 per cent.

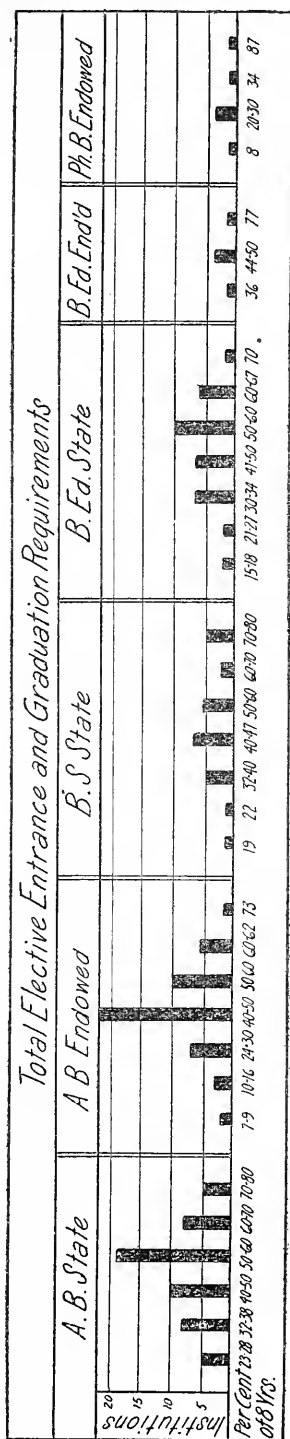
**A. B. (ENDOWED).**

2 elect from 7.90 to 9.90 per cent.  
 3 elect from 10.25 to 16.44 per cent.  
 7 elect from 24.13 to 30 per cent.  
 22 elect from 40.56 to 50 per cent.  
 10 elect from 52.63 to 60 per cent.  
 5 elect from 60.57 to 62.49 per cent.  
 1 elects 72.97 per cent.

**B. S. (ENDOWED).**

None.





GRAPH 28.

*Summary of total elective entrance and college work—Continued.*

## B. ED., ETC. (STATE).

2 elect from 15.01 to 18.94 per cent.  
 2 elect from 21.67 to 27.46 per cent.  
 6 elect from 30.36 to 34.38 per cent.  
 6 elect from 41.70 to 49.70 per cent.  
 9 elect from 50.66 to 59.67 per cent.  
 5 elect from 60.86 to 67.09 per cent.  
 1 elects 70.84 per cent.

## PH. B. (STATE).

1 elects 43.46 per cent.

## LITT. B. (STATE).

1 elects 23.81 per cent.

## B. ED., ETC. (ENDOWED).

1 elects 36.66 per cent.  
 3 elect from 44.05 to 49.16 per cent.  
 1 elects 77.50 per cent.

## PH. B. (ENDOWED).

1 elects 8.25 per cent.  
 3 elect from 20.25 to 29.76 per cent.  
 1 elects 34.6 per cent.  
 1 elects 87.26 per cent.

## LITT. B. (ENDOWED).

1 elects 44.55 per cent.

TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period.*

## BACHELOR OF ARTS.

Subject.	Ne-braska.	South Dakota.	Wy-oming.	Michi-gan.	Minne-sota.	Ne-vada.	Arkan-sas.	North Dakota.	State College of Wash-ington.	Pitts-burgh.
English.....	8.31	12.34	12.43	12.50	12.50	12.50	13.09	14.10	16.66	12.39

Subject.	Yale.
Foreign language.....	12.58

Subject.	Iowa.	Ore-gon.	Porto Rico.	Corn-ell.	Wis-consin.	Col-gate.	Wes-leyan.	Har-vard.	Bow-doin.	Penn-sylvania State Col-lege.	De Pauw.	Chi-cago.
English.....	14.16	12.50	11.87	10.00	9.64	11.84	12.85	11.59	13.29	15.34	18.54	12.79
Foreign language..	10.00	12.50	13.54	19.60	28.08	13.67	12.85	17.12	16.23	17.83	16.04	36.77
Total.....	24.16	25.00	25.41	29.16	37.72	25.51	25.70	28.71	29.52	33.16	34.58	49.56

Subject.	Colorado.
English.....	12.50
History.....	9.16
Total.....	21.66

TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## BACHELOR OF ARTS—continued.

Subject.	Western Reserve.	Swarthmore.
English.....	12.45	14.35
Mathematics.....	12.45	11.08
Total.....	24.90	25.43

Subject.	New Mexico.	Smith.
English.....	15.00	12.83
Foreign language.....	12.50	18.80
History.....	13.33	5.95
Total.....	40.83	37.60

Subject.	Montana.	Arizona.	Beloit.	Baker.	Washington.	Bryn Mawr.
English.....	15.84	16.66	11.66	15.00	15.00	18.33
Foreign language.....	11.66	13.33	11.66	15.00	21.66	29.16
Science.....	5.84	6.66	5.87	8.33	5.83	6.66
Total.....	33.34	35.65	29.19	38.33	42.49	54.15

Subject.	Mis-souri.	Maine.	Ten-nessee.	Ala-bama.	How-ard.	Ver-mont.	North Caro-lina.	Tufts.	Earl-ham.
English.....	12.46	14.09	15.70	15.71	12.50	14.30	16.54	12.50	11.66
Foreign language.....	10.76	16.60	19.28	20.71	30.00	32.00	32.01	11.66	14.16
Mathematics.....	4.56	8.61	11.43	13.21	9.16	11.78	12.26	9.16	8.33
Total.....	27.78	39.30	46.41	50.63	51.66	58.08	60.81	33.32	34.15

Subject.	North-west-ern.	George Wash-ington.	Wel-lesley.	Carle-ton.	Wash-ington and Lee.	Colum-bia.	Prince-ton.	Tulane.	Am-herst.
English.....	14.17	15.00	12.54	12.50	12.38	14.16	10.68	14.68	13.16
Foreign language.....	12.50	11.66	13.33	16.66	18.57	20.83	26.11	19.36	22.77
Mathematics.....	9.16	10.83	12.54	10.00	10.71	12.08	10.74	13.92	12.21
Total.....	36.06	37.49	38.41	39.16	41.66	47.07	47.53	47.96	48.14

Subject.	Van-der-bilt.	Dart-mouth.	New York.	Trin-ity (N. C.)	Wil-liams.	Univer-sity of South.	Ham-ilton.	Union.	Muh-len-berg.
English.....	12.33	12.83	12.50	14.69	11.96	15.12	20.00	16.86	17.14
Foreign language.....	24.69	25.67	27.50	24.68	33.18	28.25	35.17	38.46	39.52
Mathematics.....	11.45	11.11	10.83	12.34	11.84	12.92	11.03	11.83	11.90
Total.....	48.47	49.61	50.83	57.71	56.98	58.29	66.20	67.11	68.56

TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## BACHELOR OF ARTS—continued.

Subjects.	Oklahoma.	Miami.	West Virginia.	Ohio State.	Ohio.	Idaho.	Johns Hopkins.	Oberlin.
English.....	13.27	12.50	14.03	11.66	12.50	15.00	15.15	11.69
Foreign language.....	9.94	12.50	14.73	20.00	20.00	11.66	30.55	16.71
History.....	4.97	8.33	6.55	8.33	8.33	10.84	5.85	5.87
Science.....	6.60	6.66	6.55	10.83	10.83	19.16	5.85	5.87
Total.....	34.78	39.99	41.86	50.82	51.66	56.66	57.40	40.14

Subjects.	Florida.	Texas.	Louisiana.	William and Mary.	Pennsylvania State College.	Virginia.	North Carolina.	Rutgers.	Georgia.
English.....	11.87	15.71	15.12	16.97	16.39	18.21	16.54	13.03	15.33
Foreign language.....	8.75	15.71	11.55	20.71	27.91	21.78	31.18	31.65	23.62
History.....	5.63	5.63	12.39	7.73	9.24	8.57	6.07	9.39	11.75
Mathematics.....	11.89	11.43	11.13	11.84	7.14	13.93	12.26	13.13	13.54
Total.....	38.14	48.48	50.19	57.25	60.68	62.49	66.05	67.10	69.24

Subjects.	Wells.	Haverford.	Vassar.	Brown.	Lafayette.	Randolph-Macon.	Union.	Catholic (classical).
English.....	14.69	13.46	12.72	15.33	12.66	17.73	16.86	13.32
Foreign language.....	25.91	23.15	28.78	27.23	35.65	39.70	38.42	45.89
History.....	3.33	6.96	6.06	8.44	4.61	5.91	8.59	9.05
Mathematics.....	11.22	11.73	12.72	11.11	10.92	12.84	11.83	11.34
Total.....	53.15	55.30	60.28	62.11	63.84	71.18	75.70	79.60

Subjects.	Illinois.	Indiana.	Kansas.	Syracuse.
English.....	11.62	11.04	12.08	12.50
Foreign language.....	9.10	14.58	14.16	24.17
Science.....	6.58	3.54	10.83	5.87
Mathematics.....	6.58	6.25	10.41	9.16
Total.....	33.88	35.41	47.48	51.70

Subjects.	South Carolina.
English.....	15.06
History.....	15.06
Science.....	5.74
Mathematics.....	15.06
Total.....	50.92

Subjects.	Kent.	California (B).	Washington.	North Carolina (3).	Delaware.	Grinnell.	Colorado.	Catholic (philos.).
English.....	14.68	9.23	12.50	16.54	16.97	12.50	15.00	11.63
Foreign language.....	12.13	9.23	13.30	19.28	26.11	21.66	18.33	30.94
History.....	4.89	5.89	9.16	6.07	8.25	5.83	5.83	15.62
Science.....	6.06	12.79	10.00	8.57	8.25	5.83	9.17	8.41
Mathematics.....	8.33	9.23	8.33	12.26	12.05	10.83	10.00	10.94
Total.....	46.09	46.37	53.32	62.72	71.63	56.65	58.53	77.54



TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## BACHELOR OF SCIENCE—continued.

Subjects.	Virginia.	Haverford.	Randolph-Macon.
English.....	18.21	13.46	17.73
Foreign language.....	19.28	23.15	23.65
History.....	8.57	6.96	5.91
Mathematics.....	13.93	11.73	12.84
Total.....	59.99	53.30	60.13

Subjects.	Florida.	Kansas.	Vermont.	Howard.
English.....	11.87	12.08	14.12	12.50
Foreign language.....	8.75	14.16	11.43	9.16
Science.....	5.63	10.83	12.52	21.66
Mathematics.....	11.87	10.41	13.91	9.16
Total.....	38.11	47.48	57.98	52.48

Subjects.	New York.	Lafayette.	Syracuse.	Catholic.	Muhlenberg.
English.....	12.50	12.59	12.50	13.87	14.29
Foreign language.....	15.00	11.37	18.33	15.33	17.86
Science.....	8.33	7.55	9.16	16.74	24.04
Mathematics.....	14.16	13.09	9.16	17.25	11.90
Total.....	39.99	44.60	49.15	63.19	68.09

Subjects.	South Carolina.
English.....	15.06
History.....	15.06
Science.....	5.74
Mathematics.....	15.06
Total.....	50.92

Subjects.	Idaho.	Delaware.	Kentucky.	William and Mary.	Rutgers.	Grinnell.	Union.	Tulane.
English.....	15.00	16.97	12.34	14.45	13.03	12.50	17.23	14.23
Foreign language.....	11.66	11.83	11.35	12.14	15.29	13.33	14.39	10.89
History.....	8.33	8.25	4.89	6.90	16.06	5.83	6.47	8.77
Science.....	10.00	8.25	18.56	18.08	16.06	5.83	9.37	17.23
Mathematics.....	10.00	12.06	12.23	13.09	13.03	10.83	16.51	17.04
Total.....	54.99	57.36	59.37	64.66	74.07	48.32	63.97	68.16

## BACHELOR OF PHILOSOPHY.

Subjects.	Chicago.
English.....	12.74

TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## BACHELOR OF PHILOSOPHY—continued.

Subjects.	Brown.	
English.....	15.33	
Foreign language.....	13.66	
History.....	8.44	
Total.....	37.43	

Subjects.	Hamilton.	Vermont.
English.....	20.00	14.30
Foreign language.....	31.73	25.43
Mathematics.....	11.03	11.78
Total.....	62.76	51.56

Subjects.	Muhlenberg.	Union.
English.....	17.14	17.23
Foreign language.....	29.52	33.74
History.....	11.18	10.04
Mathematics.....	11.90	11.83
Total.....	69.74	72.84

Subjects.	Lafayette.	Catholic.
English.....	12.66	11.64
Foreign language.....	26.45	30.47
History.....	4.61	13.02
Science.....	7.68	8.42
Mathematics.....	10.92	10.94
Total.....	62.32	74.49

## BACHELOR OF LITERATURE. BACHELOR OF LETTERS.

Subjects.	Princeton.
English.....	10.68
Foreign language.....	17.68
Mathematics.....	10.74
Total.....	39.10

Subjects.	Rutgers.
English.....	13.03
Foreign language.....	71.65
History.....	9.39
Mathematics.....	13.03
Total.....	67.10

TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## THE BACHELOR'S DEGREE IN EDUCATION.

Subject.	Ne- braska.	Michi- gan.	Minne- sota.	Nevada.	Arkan- sas.	North Dakota.	Missis- sippi.
English.....	8.31	12.50	12.50	12.50	13.09	14.10	15.32
Subjects.						Iowa.	George Wash- ington.
English.....						14.16	12.42
Foreign language.....						10.00	11.50
Total.....						24.16	23.92
Subjects.						Colorado.	Oregon.
English.....						12.50	11.25
History.....						13.33	6.66
Total.....						25.83	27.91
Subjects.							Pitts- burgh.
English.....							12.34
History.....							4.68
Total.....							17.02
Subjects.							New Mexico.
English.....							14.69
Foreign language.....							12.13
History.....							8.12
Total.....							34.94
Subjects.		Missouri.	Florida.	Alabama.	Tennes- see.	Howard.	Vermont.
English.....		12.50	11.87	10.71	15.71	14.76	14.30
Foreign language.....		10.83	8.75	10.71	19.28	29.52	32.05
Mathematics.....		4.58	9.37	10.71	11.43	9.04	11.78
Total.....		27.91	29.99	32.13	46.42	53.32	58.13
Subjects.						Wash- ington.	Wyo- ming.
English.....						12.41	12.43
History.....						5.75	9.10
Science.....						6.56	5.77
Total.....						24.72	27.30
Subjects.				Okla- homa.	Ohio State.	Miami.	Johns Hopkins.
English.....				13.12	14.16	23.33	13.33
Foreign language.....				9.78	20.00	13.33	20.00
History.....				4.90	8.33	14.16	5.00
Science.....				6.45	6.66	6.66	5.83
Total.....				31.25	49.15	57.48	44.16



TABLE 73.—*Distribution of subjects prescribed both for entrance and for graduation, including total percentages for the eight-year period—Continued.*

## THE BACHELOR'S DEGREE IN EDUCATION—continued.

Subjects.	Idaho. (A. B.)	Louisiana.	Texas.	Georgia.	North Carolina.
English.....	13.33	15.12	15.47	15.26	15.71
Foreign language.....	11.66	11.55	15.47	16.23	27.85
History.....	6.66	12.39	9.52	11.68	6.07
Mathematics.....	6.66	11.13	11.31	13.47	12.26
Total.....	38.61	50.19	51.77	56.64	61.89

Subjects.	Idaho. (B. S.)	South Carolina.	Kansas.	Tulane.
English.....	13.33	15.06	11.90	14.54
Foreign language.....	11.66	4.35	13.78	11.22
Science.....	6.66	7.91	10.45	10.93
Mathematics.....	6.66	15.06	10.23	13.78
Total.....	38.61	42.38	46.36	50.47

## SUBJECTS WHICH ARE PRESCRIBED BOTH FOR ENTRANCE AND FOR COLLEGE.

In the previous section consideration has been given to each prescribed subject from the standpoint of the eight-year period. The accompanying table shows the subjects which are prescribed both for entrance and for college. It is evident from a study of this table that a large group of institutions prescribe the same subjects both for entrance and for college, the total amount varying from 29.19 per cent to 79.60 per cent of the entire eight-year period. The number and distribution of these prescribed studies is shown in the preceding tables and in the following summary:

*Subjects prescribed both for entrance and for college.*

## A. B. DEGREE.

Number of subjects prescribed both for entrance and for graduation.	Names of subjects prescribed both for entrance and for graduation.	Number of State institutions prescribing these subjects.	Number of endowed institutions prescribing these subjects.	Total number of institutions prescribing these subjects.
1	English.....	9	2	11
	Foreign language.....	0	1	1
	Total.....	9	3	12
2	English and foreign language.....	5	7	12
	English and history.....	1	0	1
	English and mathematics.....	0	2	2
3	Total.....	6	9	15
	English, foreign language, history.....	1	1	2
	English, foreign language, mathematics.....	7	20	27
4	English, foreign language, science.....	2	4	6
	Total.....	10	25	35
	English, foreign language, history, science.....	6	2	8
5	English, foreign language, history, mathematics.....	9	8	17
	English, foreign language, science, mathematics.....	3	1	4
	English, history, science, mathematics.....	1	0	1
6	Total.....	19	11	30
	English, foreign language, history, science, mathematics.....	5	3	8

*Subjects prescribed both for entrance and for college—Continued.*

## B. S. DEGREE.

Number of subjects prescribed both for entrance and for graduation.	Names of subjects prescribed both for entrance and for graduation.	Number of State institutions prescribing these subjects.	Number of endowed institutions prescribing these subjects.	Total number of institutions prescribing these subjects.
1	English.....	5	2	7
2	{English, foreign language.....	1	1	2
	{English, mathematics.....	1	0	1
	Total.....	2	1	3
3	{English, foreign language, science.....	1	1	2
	{English, foreign language, mathematics.....	0	12	12
	{English, history, mathematics.....	1	0	1
	{English, science, mathematics.....	1	1	2
	Total.....	3	14	17
4	{English, foreign language, history, mathematics.....	1	2	3
	{English, foreign language, science, mathematics.....	4	5	9
	{English, history, science, mathematics.....	1	0	1
	Total.....	6	7	13
5	English, foreign language, history, science, mathematics.....	5	3	8

## B. ED. DEGREE.

1	English.....	7	2	9
2	{English, foreign language.....	1	1	2
	{English, history.....	2	1	3
	Total.....	3	2	5
3	{English, foreign language, history.....	1	0	1
	{English, foreign language, mathematics.....	6	0	6
	{English, history, science.....	2	0	2
	Total.....	9	0	9
4	{English, foreign language, history, science.....	3	1	4
	{English, foreign language, history, mathematics.....	5	0	6
	{English, foreign language, science, mathematics.....	3	1	4
	Total.....	11	2	14

## PH. B. DEGREE.

1	English.....	0	1	1
3	{English, foreign language, history.....	0	1	1
	{English, foreign language, mathematics.....	0	1	1
	Total.....	0	2	2
4	English, foreign language, history, mathematics.....	1	2	3
5	English, foreign language, history, science, mathematics.....	0	2	2

## LITT. B. DEGREE.

3	English, foreign language, mathematics.....	0	1	1
4	English, foreign language, history, mathematics.....	1	0	1

TABLE 74.

Degree.	English.	Foreign language.	Mathematics.	Science.	Social science.	Total number of instances.
A. B. (State).....	48	39	19	17	23	49
A. B. (endowed).....	47	47	34	10	15	50
B. S. (State).....	21	11	14	11	8	22
B. S. (endowed).....	27	24	22	11	5	27
B. Ed. (State).....	29	19	14	8	13	30
B. Ed. (endowed).....	6	3	1	2	2	6
Ph. B. (State).....	1	1	1	0	1	1
Ph. B. (endowed).....	7	6	5	2	4	7
Litt. B. (State).....	1	1	1	0	1	1
Litt. B. (endowed).....	1	1	1	0	0	1
Total.....	188	152	112	61	72	194

Table 74 gives the number of schools which prescribe both for entrance and for college the subjects given at the head of the columns. The column to the right gives the total number of institutions which grant the degrees indicated on the left-hand column.

If we consider 194 the approximate total number in curricula, we find that English is prescribed both for entrance and for college in 96.9 per cent of this number, foreign language in 78.3 per cent, mathematics in 56.4 per cent, science in 28.2 per cent, and social science in 37.1 per cent.

If we consider the 194 curricula in toto, we find that 60.3 per cent of all the work is prescribed both for entrance and college.

#### SUMMARY AND CONCLUSION.

The averages of the different prescribed subjects, considered from the standpoint of the eight-year period, vary from 75 per cent to 27.59 per cent, the degrees being considered separately. The general averages of the different prescribed subjects vary from 2.29 per cent to 17.26 per cent.

The general average of the total of prescribed subjects in the 101 institutions for the eight-year period is 53.05 per cent; of the total elective subjects, 46.77 per cent.

One subject is prescribed for the A. B. degree from 8.31 per cent to 25.58 per cent of the eight-year period (11 institutions).

Two subjects are prescribed for the A. B. degree from 21.66 per cent to 49.56 per cent of the eight-year period (15 institutions).

Three subjects are prescribed for the A. B. degree from 29.19 per cent to 68.58 per cent of the eight-year period (35 institutions).

Four subjects are prescribed for the A. B. degree from 34.78 per cent to 79.60 per cent of the eight-year period (29 institutions).

Five subjects are prescribed for the A. B. degree from 46.37 per cent to 77.54 per cent of the eight-year period (eight institutions).

The data above show the possibility of continuous work in the subjects prescribed both for entrance and for college work.

### THE UNIFICATION OF THE BACHELOR'S DEGREE COURSE.

It is evident from the foregoing chapters that the standards of entrance and graduation requirements for the bachelor's degree are extremely variable. This variability is so noticeable in the graduation requirements that it is difficult to determine whether there is in many instances a clear concept of what the bachelor's course ought to be. In the early history of the Nation, when higher education was largely under church control, the chief aim of the college was the education of the clergy. But to-day the aims of the liberal-arts colleges may be classified under three groups, judged by the statements made by the colleges of our list. Although we can not expect to find in college catalogues the full elaboration of aims or purposes as might be expected in a textbook on education, yet it is interesting to find that 42 of the 51 State schools and 33 of the 50 endowed schools under discussion give fairly clear statements of the purpose of the college course. The largest group is that of 11 State and 6 endowed schools, which holds that the aim of the liberal-arts course is to give a broad foundation in liberal culture, to give opportunity for specialization as a preparation for the professions both learned and technical. The second group, comprising 4 State and 9 endowed schools, holds that the aim is to develop sound scholarship, mental discipline, and general culture. The third group, comprising 12 endowed schools, stresses the importance of religious and moral aims in addition to scholarly attainments. With respect to the bachelor in education, there is more definiteness of aim, as the curricula are decidedly professional.

### THE FIRST STEP IN THE UNIFICATION OF THE HIGH SCHOOL AND COLLEGE CURRICULA.

When at last the régime of prescribed studies broke down for both entrance and college requirements, a more effective articulation was developed between the entrance and college programs of study. The adoption of the elective system in the entrance requirements was the first step in bringing into coherent relation the two great agencies of higher education. But now the articulation between high school and college has reached a state where there exists little opportunity for further advance in that respect. In many institutions flexibility has reached its limits; unrestricted entrance to college may now be gained by the presentation of a certificate from any first-class high school. But this flexibility in the high-school curricula has been paralleled to a certain extent by the rapid expansion of the free elective system in the college. Thus an undue flexibility has developed which has taken nearly all backbone out of higher education in many institutions.<sup>1</sup>

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<sup>1</sup> The plan of comprehensive examinations, adopted by several of the leading colleges of the East, should be a partial remedy for the weaknesses caused by undue flexibility in the entrance requirements.

## THE SECOND STEP IN UNIFICATION.

The next step in unification is the providing of a groundwork of studies which will weld the systems of secondary and college education into a whole without losing the benefits of the elective system. Such a plan must provide a broad distribution of fundamental cultural and tool subjects from the definite standpoint of a seven or eight-year course. An excellent distribution now exists in the majority of schools both for the entrance and college requirements, although in some cases it may be possible for students to specialize too early at the expense of a broad foundation in liberal culture. The tables on page 230, etc., show the possibility of a more unified bachelor's course on the basis of four or five of the fundamental subjects which are prescribed both for entrance and for the college. English, language, mathematics, history (social science), and science are prescribed both for entrance and graduation by nearly 40 per cent of the institutions listed, the amount of the joint prescription varying from 34 to 79 per cent of the eight-year period. About 75 per cent of these colleges control the prescribed work in at least three fundamental subjects, such as English, language, and mathematics, from 27 to 79 per cent of the eight-year period. In over 90 per cent of the 101 colleges of our list the average total requirements of subjects prescribed jointly cover over 60 per cent of the eight-year period. This unity, as far as prescribed subjects are concerned, gives a true basis for continuity in the different subjects, although in some instances needless duplication results. With this evidence of the actual control by the college of the combined curricula, it is clear that it lies within the power of the college to further determine such distribution and concentration of studies over the eight-year period that will insure a thorough as well as a broad scholarship. In order that this result may be accomplished, both educator and student should conceive of the college course as a single unit of seven or eight years. Within this period the candidate for the bachelor's degree should be permitted to elect, preferably at the beginning of the eleventh grade, a fundamental distribution group of a minimum of four or a maximum of six subjects. Students electing the sequences recommended by the college would be counted and graded as regular candidates for the A. B. degree, while those who follow the usual high school program would plan their work in harmony with the general or vocational aims of the high school. If a student should enter high school, not desiring to become a candidate for the A. B. degree, and should change his mind in the twelfth grade, he would then be obliged to complete the necessary sequences in order to be in line for the A. B. degree. While some loss of time might be entailed, yet the student would not have to lose more than was necessary to give himself

a mastery in those fundamentals deemed essential by the college. A similar delay is often experienced by the candidate for the M. A. degree who finds that he has not given enough time to his major subject during the four years of undergraduate work to insure graduation in one year after receiving the A. B. degree. In such cases the candidate must spend a half year or more in supplementing his major work.

The sequences determined by the college are to be as free as possible from gaps in order that continuity and concentration be insured. Useless duplication of subjects should be avoided. A final examination covering the entire ground of each sequence might well be required of all A. B. candidates in addition to the usual term or annual examinations.

No great difference exists between the plan suggested and the customary plan of the major and minor option. At least one major sequence six or seven years in length should be required. A second sequence five or six years in length would support the first. These sequences should be the basis of professional specialization. Two tool sequences from three to four years in length ought to begin early in the course so that they might be of help to the student in his major studies.

From the standpoint of distribution the sequences chosen should lead to a broad foundation in liberal culture, while from the standpoint of concentration they should lead to scholarship and professional attainments.

Suitable sequences may be determined for those who expect to be ministers, literary workers, teachers, lawyers, doctors, agriculturalists, engineers, commercial leaders, social workers, home economists, and the like. If such sequences be properly developed there will also be opportunity in each case to develop the motor side of higher education, an element often neglected in the nonprofessional courses of liberal arts colleges. The knowledge gained by the student in college should have some practical tests and applications in real life before graduation day, in order that he may not be thrown into the whirlpool of the world's activities with theories and visions only. The entrance of the professional aim into the courses would tend to invigorate the entire program by giving each student important incentives based on real interest in the work at hand. The difference between the vigor and tone of the work of the liberal arts colleges and the professional schools, such as law and medicine, is very noticeable. The addition of a lawful stimulus due to professional interest should be a powerful element in making for discipline and first-class scholarship. While independent and reflective scholarship must be safeguarded from the mere routine of professionalism, there is great need of more continuous and purposeful effort on the part of the students of liberal arts colleges.

## PRESENT TENDENCIES TOWARD A UNIFIED EIGHT-YEAR COURSE.

For a number of years several universities and colleges of high standing have taken the initiative in outlining a part of the bachelor's degree course in terms of the entire period (eight years).<sup>1</sup> Ohio State University and Ohio University make the following requirements:

In high school and college together the student must secure credit in at least two languages other than English. For those who enter with 6 units in language other than English, the college requirement is 8 hours; for those with 5 units, 12 hours; for those with 3 units, 20 hours; for those with 10 units, 24 hours; for those with 1 unit, 28 hours; for those with no units, 32 hours. Natural science, social science, and mathematics are also dealt with from the standpoint of the 8-year period. (The high school unit equals 4 semester hours.)

The University of California offers a unified course through its combined high school and junior college requirements.

The University of Pittsburg makes the following requirements: Eighteen credits (secondary and college included) must be taken in each of the distribution fields exclusive of specifically required subjects; courses in English 1 and 2 are counted in satisfaction of major requirement. Likewise 18 credits (semester hours) in some foreign language (courses taken in secondary schools to be included), or 12 such credits for those who offer 12 credits in Latin or Greek; and 12 in some other foreign language. (The high school unit equals 6 semester hours.) Other definite requirements are made for both the A. B. and B. S. degrees on the basis of both secondary and college work.

Vanderbilt University states that the required subjects of the freshman year are grouped with special reference to the continuation of the leading subjects offered for admission.

Teachers College, George Washington University, permits the substitution of college electives in place of foreign language, history, and biology, which are a part of the list of prescribed subjects, "to the extent that approved secondary school work has been done in them." But "the foreign language requirement must fall in one language, while in history it is required that a survey of the world's history be obtained."

Beloit College requires that "where 4 units of foreign language have been presented for entrance, the student must complete 12 hours of foreign language work of college grade; where 2 units have been presented, he must complete 18 hours; where no foreign language has been presented, he must complete 20 hours. Any student presenting less than 2 units of foreign language at entrance shall be required to complete 132 hours for graduation" (8 hours more than the usual requirement).

Carleton College requires that students must complete for the A. B. degree six years in foreign language in secondary school and college, of which two years must be in Latin and two years must be taken in college. The requirements for the B. S. degree are stated in a similar manner, but only four years are required, and Latin is not specified.

The University of Chicago has developed the idea of continuation to a marked degree. "The attention of students is drawn to the fact, as explained below, that certain subjects are required which may be taken either in the high school or in the college. It is urgently recommended that as many as possible be taken during the high-school course. Students who are preparing for a professional degree or for specialized work will materially increase the opportunity for freedom of election by adopting the following suggestions for their high-school work:

"A student is advised to take throughout his last year of high school some subject other than English which will form the basis of the continuation group of his first

year in college. Proper subjects for this continuation group are history, Greek, Latin, French, German, mathematics, physics, chemistry, physiography, and biology. This study may form a part of the principal or the secondary group.'

The college requirements are built upon these continuation groups in such an manner as to obtain adequate distribution and concentration.

Harvard University obtains continuity and concentration to a considerable extent by stressing the entrance requirements in English, French, and German. Students who pass the special examinations in these subjects on entering college are able to pursue their elective subjects with greater freedom.

The examples just cited show a growing recognition of the unity of the bachelor's degree course. With few exceptions, however, foreign language is the only subject that has definite recognition. When approved sequences in English, mathematics, science, social science, and vocational subjects are also prepared, it will be possible to unify the college course to a much greater extent throughout the entire eight-year period.

Such sequences in fundamental and tool subjects would tend to bring an essential unity into the bachelor's degree course over the entire country.

#### UNIFICATION IN RELATION TO DIFFERENT TYPES OF COLLEGES.

The institutions under discussion may be divided into three general groups with respect to the program of unification of the bachelor's degree course.

Unification may be readily obtained in colleges which have one or two prescribed subjects by utilizing a plan similar to that of the University of Chicago, but the sequences should be carefully determined from the standpoint of the eight years and with the different professional aims in view.

Unification may be further obtained in institutions which require definite degree or core groups by readjusting the groups in harmony with the approved sequences. Each group would then have a professional or vocational objective. While there is no objection to the building of a group around a specific major subject, yet in the new groups the aim should be that each should have a definite vocational or professional aim in addition to the elements of discipline and culture.

Unification may be obtained in the group of institutions on our list which now prescribe jointly over 50 per cent of the eight-year's work, by a slight readjustment of the present sequences and by requiring as far as possible in each sequence a continuous series of courses free from needless gaps or reduplications. In the smaller colleges there would, of course, be more difficulty in administering so many different kinds of sequences. Each institution should select the sequences which are adapted to its particular character.



## THE AIM OF THE A. B. DEGREE.

Up to the present time the aim of the A. B. course has been to produce either educated specialists, or men who have gained general abilities due to a strong mental discipline, although each college may differ slightly in the understanding and in the interpretation of these purposes. The first aim is criticized because it makes the student strong at one point only—his speciality. He is in danger of becoming merely an educated “hewer of wood and drawer of water” and as President Wilson has said, “the man of special skill may be changed into an unskilled laborer over night.” “Men with mere technical knowledge will be mere servants perpetually and may at any time become useless servants, their skill gone out of use and fashion.”

The other aim is criticized in that it fails to encourage a definite purpose in life; while the mind has received a broad culture through study of ideals, and through discipline by rigorous methods of study, it lacks the important view points and peculiar discipline obtained by contact with more material reality. Men whose faculties have been awakened and released need an opportunity to apply, along practical lines, and under guidance, some of the acquired generalized experience. While there may be some who do not find the dominant interest of their lives during the period of college life, yet every encouragement should be offered that will help in finding it.

But how may these difficulties be overcome? First, by insisting on a broad, liberal foundation of study for the specialist; second, by improving the character of the special or major sequences so that broken and slipshod work will be impossible. Many of the valuable disciplinary and cultural values which have seemed the exclusive property of the long sequences in ancient languages and mathematics are to-day being found in modern languages, science, and social science, and there is important discipline in vocational studies if properly taught. Dr. Nathaniel Butler has pointed out that one of the most important disciplines boys and young men of to-day lack is that gained by doing chores. Many of our most famous classical scholars were farm boys, and some may ask whether the analysis of cause and effect in feeding calves and in milking cows at 4 a. m. and in planning the sowing and harvesting of crops, has not played an equally important part in connection with literary training in making strong and able men. The present substitute for chores may be found perhaps in the scientific vocational preparation of the student both in high school and college.

In view of the impending changes in the life of the Nation which may result from the war, one thing is very evident—the need of a type of higher education that will quickly and thoroughly prepare

sound leaders who can meet the increasing calls in the higher vocations of life. Added national and international responsibilities which are now pressing with a heavy weight on the American people, call for young men and women whose training is of the highest from a moral standpoint. A more thorough mastery of the social sciences and of law will be necessary in order that democracy may continue in triumphant growth. A deeper knowledge and appreciation of the language, literature, and culture of the nations which are our neighbors on this hemisphere should be taught before we can fully obtain the harmonious relations which are now of greater importance than ever.

In a word the A. B. degree curriculum should aim to bring its subject matter, culture, and disciplines into the closest contact with real life.

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28. Present Standards of Higher Education in the United States. Geo. S. McLean.<sup>1</sup>
29. Present Movements in University and College Administration. S. P. Capen.<sup>1</sup>

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## APPENDIX A.

*Medical examination of intrants of the University of California, 1915-16.*

[Total number of men examined, 1,144; women, 1,115.]

### DISEASES OR ABNORMALITIES.

	Men.		Women.	
	Number.	Percent.	Number.	Percent.
Abdominal.....	62	5.00	103	9.20
Chest.....	175	15.00	120	10.76
Ears.....	107	9.00	139	12.46
Eyes.....	705	61.00	656	58.83
Feet.....	2,409		1,235	
Blood pressure.....			2	.17
General development:				
Excellent.....	6	0.50	27	2.30
Good.....	440	38.00	693	62.15
Fair.....	504	44.00	352	31.56
Poor.....	194	17.00	43	4.00
Genitalia.....	329	28.70		
Testes.....	50	4.30		
Menstrual.....			1,044	93.63
Heart.....	207	18.00	68	6.98
Joints.....	1	.09		
Lungs.....	13	1.10	12	1.07
Lymph nodes:				
Cervical.....	39	3.40	374	33.54
Axillary.....	108	9.40	45	4.03
Inguinal.....	140	12.00	53	4.75
Mammary glands:				
Supernumerary.....	40	3.00		
Nose.....	436	38.00	156	13.90
Skin.....	701	61.00	668	59.80
Nutrition:				
Thin.....	237	20.00	213	19.00
Average.....	857	74.00	821	73.60
Obese.....	50	4.30	81	7.20
Teeth perfect.....	82	7.00	56	5.00
Teeth abnormal.....	1,062	93.00	1,059	95.00
Throat.....	151	13.00	116	10.40
Thyroid.....	( <sup>2</sup> )		64	5.70
Vaccination:				
Never vaccinated.....	94	8.00	75	6.80
No visible scar.....	97	8.40	97	8.60
History of smallpox.....	1	.09	3	.26
Varicocele (left).....	52	4.50		
Vertebral column.....	64	6.90	188	16.8
Surgical operations before applying for entrance.....	787	68.00	433	38.83
Number of different diseases.....	38	3.48	46	4.10

<sup>1</sup> The percentages should not be interpreted too literally as there is some duplication.

<sup>2</sup> Included under throat.

The following medical examination card is used by Harvard University in the examination of freshmen:

### HARVARD UNIVERSITY.

#### DEPARTMENT OF HYGIENE.

Full name of student.....  
 Class..... Age..... Date of examination.....

#### FAMILY HISTORY.

F., born in.....  
 M., born in.....  
 .....  
 .....

## PAST HISTORY.

Underline and give approximate age at which subject had any of the diseases listed in the square:

What injuries? .....  
 What operations? .....  
 Present general health .....  
 Appetite ..... Sleep ..... hours  
 Best study time ..... m. Began school ..... years  
 Attended school ..... years  
 Have done .....; also .....  
 (Other forms of mental work.) (Physical work.)  
 Usual recreation ..... hours per week  
 Date of last successful vaccination ..... Never. Failures .....  
 Typhoid vaccination ..... Date .....  
 Cups tea, average ... per ... Cups coffee, average ... per ...  
 Cigars, average ... per ... Glasses beer, average ... per ...  
 Pipes, average ... per ... Glasses wine, average ... per ...  
 Cigarettes, average ... per ... Glasses spirits, average ... per ...

Measles  
 Pertussis  
 Mumps  
 Chicken pox  
 Scarlet fever  
 Typhoid fever  
 Diphtheria  
 Malaria  
 Smallpox  
 Pneumonia  
 Pleurisy  
 Rheumatism  
 Tonsilitis  
 Influenza  
 Otitis media  
 Gonorrhea  
 Syphilis  
 Constipation  
 Others:

## PHYSICAL EXAMINATION.

Color ..... Apparent age ..... Peculiarities .....  
 Eyes ..... Right ..... Left ..... Corrected to ..... Right ..... Left .....  
 Gen. Devl.: excel., av., poor. N.: thin, av., obese. Skin: pale, norm., high, very smooth, rough.

Scars .....  
 Acne: Face ..... Chest ..... Back .....  
 Weight: ..... lbs. Height: ..... Pup.: R. L. re. to l. and d. Thyroid: norm., sl. enlarged.

Teeth: good, av., poor, neglected, false.

Shoulders: norm., round. Scapula: norm., scaphoid. Vac.: R. L. arm, leg, doubtful, irreg., good.

Chest: norm., flat, funnel, pigeon, flaring at base.

Heart: rate .....: Regular, irreg., interm., A<sub>2</sub> P<sub>2</sub>.

From med. line	{	Left nipple	= ..... cm.
		L. bord. card. dul. (5th sp.)	= ..... cm.
		R. bord. card. dul. (4th sp.)	= ..... cm.
		Ap. imp. Seen, felt	= ..... cm.

Murmurs .....  
 Lungs .....  
 B. P. standing. S. .... mm. D. .... mm. recumbent. S. .... mm. D. .... mm.

Blood: Hgb. = ..... per cent (Tallquist)

Abdomen: norm. Hernia: ing., fem., umb., epig. Liv.: edge ..... felt.

Spleen: ..... felt. R. Kid.: ..... felt. L. Kid.: ..... felt.

Penis: norm., circum. Testes: R. .... L. .... Varicocele: R. .... L. .... Lymph N.: C. .... Ax. .... Epitr. .... Ing. ....

Knee J.: R. .... L. .... Vert. Col.: norm. Lordosis: .....  
 Scoliosis: ..... dors. .... lumb. ....

Feet: Long arches: R. norm., low, flat. L. norm., low, flat. Ant. Arches: R. norm., low. L. norm., low.

*Nose:* Nor., Spe., Spur., Cr., Dev., Chr. Hyp.....*Adenoids:* L., S., Chr.  
 Pharynx.....  
*Tonsils:* 1, 2, 3, 4.....  
*Hearing:* good, fair, poor. Needs aurist.....  
 Wears glasses, constantly, reading, distance, when obtained.  
 Needs to see oculist.  
*Urine:* Sp. G.= Alb.= Sug.= Sed.=

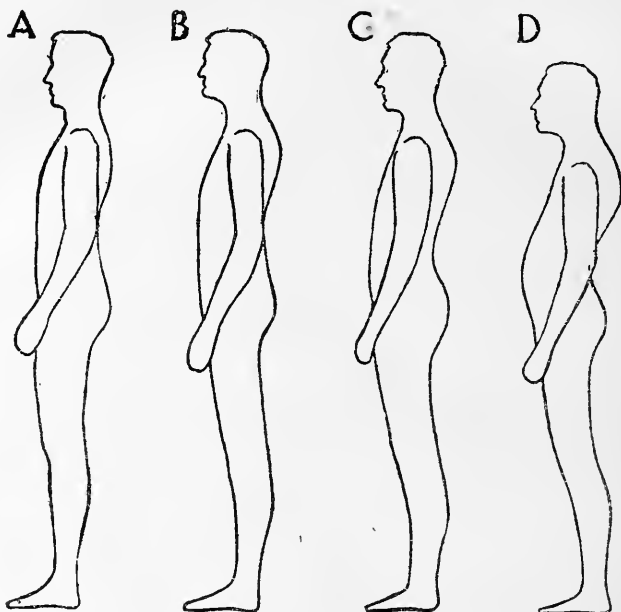
The data resulting from the examination of 746 students at Harvard University is here given, as it throws light on the physical condition of students who are entering college. The following table is taken from the report of a special study on posture made by Dr. Lloyd T. Brown in connection with the regular examination of freshmen by Dr. Roger I. Lee, professor of hygiene of the university:

*Total number of cases, 746.*

Grade.	No. A.	Per cent.	No. B.	Per cent.	No. C.	Per cent.	No. D.	Per cent.
Natural posture.....	50	6.7	90	12.1	413	55.4	193	25.9
Corrected posture.....	94	12.6	182	24.4	283	37.9	187	25.1
Backache.....					26	6.3	17	8.8
Albuminuria.....	1	2.0	1	1.1	14	3.4	14	7.2
Bowels—med. 1 or more a month.....	6	12.0	3	3.3	30	7.2	22	11.4
Cardiac cases.....	2	4.0	5	5.5	14	3.4	14	7.2
Infectious diseases, 4 or more.....	27	56.0	57	63.3	214	51.8	88	45.5
Appendicitis operations.....	3	6.0	7	7.7	41	9.9	21	10.8
Two or more operations.....	2	4.0	3	3.3	37	8.9	18	9.3
Operations, tonsils and adenoids.....	27	56.0	47	52.0	197	47.7	85	44.0
Hernia with operation.....	1	2.0	1	1.1	11	2.6	3	1.5
Hernia—no operation.....	2	4.0	3	3.3	2	.5	1	.5
Mastoid operation.....	2	4.0	1	1.1	11	2.6		
Nasal operation.....	1	2.0	2	2.2	13	3.1	5	2.5
Glands of neck operation.....	1	2.0	1	1.1	11	2.6	3	1.5
Varicocele.....	11	22.0	9	9.9	72	17.4	38	19.6
Tachycardia.....	4	8.0	3	3.3	20	4.8	10	5.2
Hypertension.....	10	20.0	17	18.8	81	19.3	22	11.4
Hypotension.....			1	1.1			1	.9
Acne.....	2	4.0	1	1.1	2	.5	1	.9
Palpable liver.....	1	2.0	1	1.1	9	2.3	2	1.0
Palpable spleen.....	1	2.0	1	1.1	10	2.4	6	3.0
Palpable kidney, right.....	1	2.0	1	1.1	2	.5	1	.5
Palpable kidney, left.....							1	.5
Glasses—occasional or constant use.....	15	30.0	30	33.3	154	37.2	69	35.6
Constipation, so-called by student.....	2	4.0			12	2.9	7	3.6
Infectious diseases (4) and appendix operation.....	1	2.0	3	3.3	9	2.3	2	1.0
Infectious diseases, appendicitis and tonsil operation.....	2	4.0	2	2.2	17	4.1	13	6.6
Infectious diseases, tonsils and adenoid operation.....	15	30.0	25	27.7	83	20.0	32	16.0
Infectious diseases and operation.....	4	8.0	4	4.4	15	3.6	3	1.5
Infectious diseases and albuminuria.....	1	2.0	1	1.1	4	.9	6	3.0
Tonsils and glands operation.....			1	1.1	1	.2		
Neurotic.....			1	1.1	7	1.8	1	.5
Thyroid, enlarged.....			2	2.2	2	.5	2	1.0
Undescended testicle.....			1	1.1	7	1.8	1	.5
Tuberculosis, hips.....					3	.7	1	.5
Pulmonary tuberculosis.....							3	1.5
Hydrocele.....			1	1.1				
Empyema.....					1	.2		
Vasomotor instability.....					1	2.0		
Hyperpituitary.....					1	2.0		
Migraine.....							1	.5
Indigestion.....							2	1.0
Jaundice.....							1	.5
General ptosis.....							1	.5
Feet good.....	40	80.0	73	81.0	342	82.8	164	85.2
Feet bad.....	8	16.0	16	17.7	66	16.0	25	13.0
Anterior arches normal.....	15	30.0	30	33.3	123	29.7	65	33.6
Anterior arches flat.....	28	56.0	54	60.0	276	61.8	122	63.3
Foot trouble in the past.....	4	8.0	8	8.8	11	2.6	3	1.5
Foot trouble at present.....	5	10.0	6	6.6	5	1.2	5	2.5
Plates.....	2	4.0	3	3.3	5	1.2	7	3.6

**HARVARD UNIVERSITY, DEPARTMENT OF HYGIENE. THE RIGHT WAY.  
THE WRONG WAY. WHERE DO YOU FIT?**

TRACINGS MADE DURING EXAMINATION OF 700 HARVARD FRESHMEN.



GRAPH 20.

Group A, 7.5 per cent. Good mechanical use of the human body. 1. Head straight above chest, hips and feet. 2. Chest up and forward. 3. Abdomen in or flat. 4. Back usual curves not exaggerated.

Group B, 12.5 per cent. Fairly good mechanical use of the human body. Note changes from Group A. 1. Head too far forward. 2. Chest not so well up or forward. 3. Abdomen very little change. 4. Back very little change.

Group C, 55 per cent. Bad mechanical use of the body. Note changes from Group A. 1. Head forward of chest. 2. Chest flat. 3. Abdomen relaxed and forward. 4. Back curves are exaggerated.

Group D, 25 per cent. Very bad mechanical use of the body. Note changes from Group A. 1. Head still farther forward. 2. Chest still flatter and farther back. 3. Abdomen completely relaxed "slouchy." 4. Back all curves exaggerated to the extreme.

The group was composed of youth and men varying from 16 to 22 years of age. Grade A included the students with normal posture, Grade B included those who had only one or a slight variation from the standard, Grade C those who had two variations, and Grade D those that varied to the extreme in some or all points of the normal posture. While it is not within the scope of this bulletin to discuss the results of the examination, yet the data and the general information gained regarding the physical condition of the young men who are to be the leaders of the Nation in the next generation, is of great value both to the student and to the university. A comparison of this table with the table of the examination of the entrants at the University of California shows the importance of the work of the college departments of physical training.



**APPENDIX B.**  
**PART I. STATE INSTITUTIONS.<sup>1</sup>**

**UNIVERSITY OF ALABAMA**

BACHELOR OF ARTS																
Entrance Requirements									Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years	
												13.33	16	Science	6.66	
												10.00	12	Social Science	5.00	
Mathematics	3											5.00	6	Mathematics	13.21	
Latin	3	21.43										20.00	24	Languages	20.71	
English	3	21.43										10.00	12	English	15.71	
Prescribed	9	64.28										58.33	70	Prescribed	61.30	
Elective	5	35.72										41.66	50	Elective	38.69	
Total	14	100.										100.	120	Total	100.	

BACHELOR OF SCIENCE																
												26.66	32	Science	13.33	
												10.00	12	M. Languages	5.00	
Mathematics	3	21.43										8.33	10	Mathematics	14.88	
English	3	21.43										10.00	12	English	15.71	
Prescribed	6	42.85										55.00	66	Prescribed	48.92	
Elective	8	57.14										45.00	54 <sup>2</sup>	Elective	51.07	
Total	14	100.										100.	120	Total	100.	

BACHELOR OF ARTS OR OF SCIENCE IN EDUCATION																
												25.00	30	Education	12.50	
												10.00	12	Social Science	5.00	
												13.33	16	Not Science	6.67	
Mathematics	3	21.43										5.00	6	Mathematics	13.21	
Languages	3	21.43										20.00	24	Languages	20.71	
English	3	21.43										10.00	12	English	15.71	
Prescribed	9	64.28										83.33	100	Prescribed	73.81	
Elective	5	35.72										16.67	20	Elective	26.19	
Total	14	100.										100.	120	Total	100.	

<sup>1</sup> The electives, the majors, and the majors and minors are listed as follows: Entrance electives, pages 58 to 59; college electives, pages 157 to 169; the major subject, page 133; the major and minor subjects, pages 134 to 136.

NOTE.—In a few institutions reorganization of curricula has taken place since the graphs were prepared.

## UNIVERSITY OF ARIZONA

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem/hrs	Subject		
Mathematics	2½	16.66											4	M. Drill	8.33	
Science	1	6.66										6.66	8	Science	6.33	
History	1	6.66													3.33	
Languages	2	13.33										13.33	16	Languages	13.33	
English	3	20.00										13.33	16	English	16.33	
Prescribed	9½	63.33										33.33	40	Prescribed	48.33	
Elective	5½	36.67										66.67	80	Elective	51.67	
Total	15	100.										100.	120	Total	100.	

## BACHELOR OF SCIENCE

Mathematics	2½	16.66										6.66	8	Mathematics	11.66
Science	1	6.66										13.33	16	Science	10.00
History	1	6.66													3.33
Languages	2	13.33										13.33	16	Languages	13.33
English	3	20.00										8.33	10	English	14.16
Prescribed	9½	63.33										41.66	50	Prescribed	52.49
Elective	5½	36.66										58.34	70	Elective	47.51
Total	15	100.										100.	120	Total	100.

## UNIVERSITY OF ARKANSAS

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem/hrs	Subject		
													4	Military Science		
Mathematics	2	14.28													7.14	
History	1	7.14													3.57	
Languages	3	21.42													10.71	
English	3	21.42										4.76	6	English	13.09	
Prescribed	9	64.27										4.76	6	Prescribed	34.50	
Elective	5	35.72										95.34	120	Elective	65.50	
Total	14	100.										100.	126	Total	100.	

## BACHELOR OF SCIENCE IN EDUCATION

Science	1	7.14											4	Military Science	3.57
History	1	7.14													3.57
English	3	21.42										25.50	32	Education	12.75
Prescribed	5	35.70										4.76	6	English	13.09
Elective	9	64.28										30.26	38	Prescribed	32.98
Total	14	100.										69.84	88	Elective	67.02
Total	14	100.										100.	126	Total	100.

## UNIVERSITY OF CALIFORNIA

## BACHELOR OF ARTS (PLAN A)

Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
													7	Military Science	
												1.71	2	Hygiene	.85
Mathematics	2	13.33										5.12	6	Mathematics	9.23
Science	1	6.66										7.68	9	Science	12.79
History	1	6.66										5.12	6	History	5.89
Languages	4	26.66										10.25	12	Languages	9.23
English	2	13.33												English	9.23
Prescribed	10	66.66										29.94	35	Prescribed	46.25
Elective	5	33.34										70.06	82	Elective	53.75
Total	15	100.										100.	117	Total	100.

## BACHELOR OF ARTS (PLAN B)

														7	Military Science	
														2	Hygiene	.85
Mathematics	2	13.33										5.12	6	Mathematics	9.23	
Science	2	13.33										10.25	12	Science	12.79	
History	1	6.66										5.12	6	History	5.89	
Languages	2	13.33										5.12	6	Languages	9.23	
English	2	13.33										5.12	6	English	9.23	
Prescribed	9	60.00										32.49	38	Prescribed	46.25	
Elective	6	40.00										67.51	79	Elective	53.75	
Total	15	100.										100.	117	Total	100.	

## UNIVERSITY OF COLORADO

## BACHELOR OF ARTS (GENERAL COURSE)

Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
													2	Physical Training	6.66
Mathematics	2	13.33													6.66
History	2	13.33										5.00	6	Social Science	9.16
Science	2	13.33													6.66
Languages	4	26.66													13.33
English	3	20.00										5.00	6	English	12.50
Prescribed	13	86.66										10.00	12	Prescribed	48.33
Elective	2	13.33										90.00	108	Elective	51.67
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS AND BACHELOR'S DIPLOMA IN EDUCATION

														24	Education	10.00
Mathematics	2	13.33													6.66	
History	2	13.33										5.00	6	Social Science	9.16	
Science	2	13.33													6.66	
Languages	4	26.66													13.33	
English	3	20.00										5.00	6	English	12.50	
Prescribed	13	86.66										30.00	36	Prescribed	58.30	
Elective	2	13.33										70.00	84	Elective	41.70	
Total	15	100.										100.	120	Total	100.	

## DELAWARE COLLEGE

## BACHELOR OF ARTS

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem Hrs	Subject	Units	Per Cent of Time
Mathematics	2½	17.85										6.25	8	Mathematics	12.05	
Science	1	7.14										9.37	12	Science	8.25	
History	1	7.14										9.37	12	Social Science	8.25	
Languages	6	42.85										9.37	12	Languages	26.11	
English	3	21.43										12.50	16	English	16.97	
Prescribed	13½	96.41										46.87	60	Prescribed	71.64	
Elective	½	3.58										53.12	68	Elective	28.36	
Total	14	100.										100.	128	Total	100.	

## BACHELOR OF SCIENCE

Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem Hrs	Subject	Units	Per Cent of Time
Mathematics	2½	17.85										6.25	8	Mathematics	12.05	
Science	1	7.14										9.37	12	Science	8.25	
History	1	7.14										9.37	12	Social Science	8.25	
Languages	2	14.28										9.37	12	Languages	11.83	
English	3	21.43										12.50	16	English	16.97	
Prescribed	9½	67.85										46.87	60	Prescribed	57.63	
Elective	4½	32.14										53.12	68	Elective	7.03	
Total	14	100.										100.	128	Total	100.	

## HOWARD UNIVERSITY

## BACHELOR OF ARTS (LANGUAGE GROUP)

Entrance Requirements													Graduation Requirements					Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject				
Mathematics	2	13.33										5.00	6	Mathematics	9.16			
History	1	6.66													3.33			
Languages	6	40.00										20.00	24	Languages	30.00			
English	3	20.00										5.00	6	English	12.00			
Prescribed	12	80.00										30.00	36	Prescribed	55.00			
Elective	3	20.00										70.00	84	Elective	45.00			
Total	15	100.										100.	120	Total	100.00			

## BACHELOR OF ARTS (SOCIAL SCIENCE GROUP)

Mathematics	2	13.33										5.00	6	Mathematics		9.16
History	2	13.33										5.00	6	History		9.16
Languages	4	26.66														13.33
English	3	20.00										5.00	6	English		12.50
Prescribed	11	73.33										15.00	18	Prescribed		44.36
Elective	4	26.67										85.00	102	Elective		55.64
Total	15	100.										100.	120	Total		100.

## BACHELOR OF SCIENCE (SCIENCE GROUP)

Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. hrs.	Subject	
Mathematics	2	13.33										5.00	6	Mathematics	9.16
Science	2	13.33										30.00	36	Science	21.66
History	2	13.33													6.66
Languages	2	13.33										5.00	6	Languages	9.16
English	3	20.00										5.00	6	English	12.50
Prescribed	11	73.33										45.00	54	Prescribed	59.16
Elective	4	26.67										55.00	66	Elective	40.84
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS OR BACHELOR OF SCIENCE AND BACHELOR'S DIPLOMA IN EDUCATION

Mathematics	2	13.33										23.81	30	Education		11.91
History	1	6.66										4.76	6	Mathematics		9.04
Languages	6	40.00										19.04	24	Languages		26.52
English	3	20.00										9.52	12	English		14.76
Prescribed	12	80.00										57.13	72	Prescribed		68.56
Elective	3	20.00										42.87	54	Elective		31.44
Total	15	100.										100.	126	Total		100.

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							Per Cent of Time in 3 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.		Subject	
													2	Military Science		
Mathematics	3	18.75											5	6	Mathematics	11.87
Science	1	6.25														3.13
History	1	6.25											5	6	History	5.63
Latin	2	12.50											5	6	Languages	8.75
English	3	18.75											5	6	English	11.87
Prescribed Elective	10	62.50											20	24	Prescribed Elective	41.25
	6	37.50											80	96		58.75
Total	16	100.											100	120	Total	100.

## BACHELOR OF SCIENCE

SCHEDULE 1: COURSES										2		Military Science	
Mathematics	3	18.75							5	6	Mathematics	11.87	
Science	1	6.25							5	6	Botany	5.63	
History	1	6.25										3.13	
Languages	2	12.50							5	6	Languages	8.75	
English	3	18.75							5	6	English	11.87	
Prescribed	10	62.50							20	24	Prescribed	41.25	
Elective	6	37.50							80	96	Elective	58.75	
Total	16	100.							100	120	Total	100.	

## BACHELOR OF ARTS, OR BACHELOR OF SCIENCE, IN EDUCATION

[illegible]

## UNIVERSITY OF GEORGIA

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements					Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time						Per Cent of Time	Sem. Hrs.	Subject
									2	Military Science
								4.61	6	Science
Mathematics	2½	17.85						9.23	12	Mathematics
History	2	14.28						9.23	12	History
Languages	5	35.71						21.53	28	Languages
English	3	21.42						9.23	12	English
Prescribed	12½	89.27						53.83	70	Prescribed
Elective	1½	10.73						46.17	60	Elective
Total	14	100.						100.	130	Total

## BACHELOR OF SCIENCE (EDUCATION)

										2	Military Science	
										18.17	24	Education
										4.54	6	Psychology
										9.09	12	Science
Mathematics	2½	17.85								9.09	12	Mathematics
History	2	14.28								9.08	12	Social Science
Languages	2	14.28								18.17	24	Languages
English	3	21.42								9.09	12	English
Prescribed	9½	67.85								77.23	102	Prescribed
Elective	4½	32.15								22.77	30	Elective
Total	14	100.								100.	132	Total

## COLLEGE OF HAWAII

## BACHELOR OF SCIENCE

BACHELOR OF SCIENCE																
Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject		
												3.13	4	Drawing	1.57	
												9.37	12	Science	4.68	
												9.37	12	Languages	4.68	
English	3	20										9.37	12	English	14.69	
Prescribed	3	20										31.24	40	Prescribed	25.62	
Elective	12	80										68.75	88	Elective	74.37	
Total	15	100										100.	128	Total	100.	

## UNIVERSITY OF IDAHO

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Percent of Time in 8 Years
Subject	Units	Percent of Time	30	60	40	20	0	20	40	60	80	Percent of Time	Semesters	Subject						
Mathematics	2	13.33										6.66	8	Military Science						3.33
Science	1	6.66																		6.66
Social Science	1	6.66										11.66	14	Science						19.16
Languages	2	13.33										15.00	18	History						10.84
English	3	20.00										10.00	12	Languages						11.66
Prescribed	9	60.00										10.00	12	English						15.00
Elective	6	40.00										46.66	56	Prescribed						53.33
												53.32	64	Elective						46.66
Total	15	100.										100.	120	Total						100.

## BACHELOR OF SCIENCE

														8	Military Science					3.33
Mathematics	2	13.33										6.66	8	Mathematics						10.00
Science	1	6.66										13.33	16	Science						10.00
Social Science	1	6.66										10.00	12	Social Science						8.33
Languages	2	13.33										10.00	12	Languages						11.66
English	3	20.00										10.00	12	English						15.00
Prescribed	9	60.00										50.00	60	Prescribed						55.
Elective	6	40.00										50.00	60	Elective						45.
Total	15	100.										100.	120	Total						100.

## BACHELOR OF ARTS IN EDUCATION

												3.33	4	Military Science						1.66
												5.83	7	Education						2.91
												3.33	4	Psychology						1.66
Mathematics	2	13.33																		6.66
Science	1	6.66																		3.33
Social Science	1	6.66										5.00	6	History						5.83
Languages	2	13.33										10.00	12	Languages						11.66
English	3	20.00										6.66	8	English						13.33
Prescribed	9	60.00										30.83	37	Prescribed						45.41
Elective	6	40.00										69.14	83	Elective						54.57
Total	15	100.										100.	120	Total						100.

## BACHELOR OF SCIENCE IN EDUCATION

												3.33	4	Military Science						1.66
												5.83	7	Education						2.91
												6.66	8	Chemistry						6.66
Mathematics	2	13.33																		6.66
Science	1	6.66																		3.33
Social Science	1	6.66																		3.33
Languages	2	13.33										10.00	12	Languages						11.66
English	3	20.00										6.66	8	English						13.33
Prescribed	9	60.00										29.15	35	Prescribed						44.55
Elective	6	40.00										70.84	85	Elective						55.42
Total	15	100.										100.	120	Total						100.



## UNIVERSITY OF ILLINOIS

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject						
													7	Physical Tr.						
												4.87	6	Philosophy	2.43					
												6.50	8	History	3.25					
Science	1	6.66										6.50	8	Science	6.58					
Mathematics	2	13.33										6.50	8	Mathematics	9.92					
Languages	2	13.33										4.87	6	Languages	9.10					
English	3	20.00										4.87	6	English	12.43					
Prescribed	8	53.33										34.12	42	Prescribed	43.92					
Elective	7	46.67										66.88	81	Elective	56.97					
Total	15	100.										100.	123	Total	100.					

BACHELOR OF SCIENCE<sup>1</sup>

													7	Physical Tr.	
												6.50	8	History	3.25
												13.00	16	Languages	6.50
Science	2	13.33										13.00	16	Science	13.17
Mathematics	2	13.33										6.50	8	Mathematics	9.92
English	3	20.00										2.43	3	English	11.21
Prescribed	7	46.66										41.45	51	Prescribed	44.05
Elective	8	53.34										58.54	72	Elective	55.94
Total	15	100.										100.	123	Total	100.

<sup>1</sup> Course dropped.

## INDIANA UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements								Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject		
Mathematics	2	12.50													6.25	
Science	1	6.25										.83	1	Hygiene	3.54	
History	1	6.25													3.12	
Languages	2	12.50										16.66	20	Languages	14.58	
English	3	18.75										3.33	4	English	11.04	
Prescribed	9	56.25										20.85	25	Prescribed	38.55	
Elective	7	43.75										79.15	95	Elective	61.45	
Total	16	100.										100.	120	Total	100.	

## STATE UNIVERSITY OF IOWA.

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject						
														4-5	Physical Training					
Mathematics	2½	16.65																		8.32
History	1	6.66																		3.33
Languages	2	13.33												6.66	8-10	Languages				10.00
English	3	20.00												8.33	10	English				14.16
Prescribed	8½	56.64												15.00	18-20	Prescribed				35.82
														13.33	16-20					
Elective	6½	43.36												85.00	102-	Elective				64.18
Total	15	100.												100.	120	Total				100.

## BACHELOR OF ARTS OR OF SCIENCE CERTIFICATE OF THE COLLEGE OF EDUCATION

														4-5	Physical Tr.					
														11.66	14	Education				5.83
														5.00	6	Psychology				2.50
Mathematics	2½	16.65																		8.33
History	1	6.66																		3.33
Languages	2	13.33												6.66	8	Languages				10.00
English	3	20.00												8.33	10	English				14.16
Prescribed	8½	56.64												31.66	38-	Prescribed				44.15
Elective	6½	43.36												68.33	82	Elective				55.84
Total	15	100.												100.	120	Total				100.

## UNIVERSITY OF KANSAS

## BACHELOR OF ARTS (OR SCIENCE)

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject						
Mathematics	2½	16.66										4.16	5	Mathematics						10.41
Science	2	13.33										8.33	10	Science						10.83
	1	6.66																		3.33
Languages	3	20.00										8.33	10	Languages						14.16
English	3	20.00										4.16	5	English						12.08
Prescribed	11½	76.66										25.00	30	Prescribed						50.82
Elective	3½	23.34										75.00	90	Elective						49.18
Total	15	100										100.	120	Total						100.

## BACHELOR OF SCIENCE IN EDUCATION

Mathematics	2½	16.66										18.17	24	Education						9.08
Science	2	13.33										3.79	5	Mathematics						10.23
	1	6.66										7.57	10	Science						10.45
Languages	3	20.00										7.57	10	Languages						13.78
English	3	20.00										3.79	5	English						11.90
Prescribed	11½	76.66										40.88	54	Prescribed						58.77
Elective	3½	23.34										59.12	78	Elective						41.23
Total	15	100										100.	132	Total						100.

## UNIVERSITY OF KENTUCKY

## BACHELOR OF ARTS

Entrance Requirements				Graduation Requirements										Percent of Time in 8 years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	
Mathematics	2½	16.66										4.68	6	Philosophy	2.34
Science	1	6.66										5.47	7	Science	8.33
History	1	6.66										3.12	4	History	6.06
Languages	2	13.33										10.93	14	Languages	4.89
English	3	20.00										9.37	12	English	12.13
Prescribed	9½	63.33										33.58	43	Prescribed	14.68
Elective	5½	36.66										66.42	85	Elective	48.45
Total	15	100.										100.	128	Total	51.54

## BACHELOR OF SCIENCE

Mathematics	2½	16.66										4.68	6	Philosophy	2.34
Science	1	6.66										7.81	10	Mathematics	12.23
History	1	6.66										30.46	39	Science	18.56
Languages	2	13.33										3.12	4	History	4.89
English	3	20.00										9.37	12	Languages	11.35
Prescribed	9½	63.33										4.68	6	English	12.34
Elective	5½	36.66										60.13	77	Prescribed	61.73
Total	15	100.										39.87	51	Elective	38.26
												100.	128	Total	100.

## LOUISIANA STATE UNIVERSITY.

## BACHELOR OF ARTS

Entrance Requirements				Graduation Requirements										Percent of Time in 8 years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	
Mathematics	2½	17.85										13.23	18	Science	6.61
History	1	7.14										4.41	6	Mathematics	11.13
Languages	2	14.28										17.64	24	Social Science	12.39
English	3	21.42										8.82	12	Languages	11.55
Prescribed	8½	60.69										8.82	12	English	15.12
Elective	5½	39.31										52.92	72	Prescribed	56.80
Total	14	100.										47.08	64	Elective	43.20
												100.	136	Total	100.

## BACHELOR OF ARTS (TEACHERS COLLEGE)

Mathematics	2½	17.85										17.64	24	Education	8.82
History	1	7.14										13.23	18	Science	6.61
Languages	2	14.28										4.41	6	Mathematics	11.13
English	3	21.42										17.64	24	Social Science	12.39
Prescribed	8½	60.69										8.82	12	Languages	11.55
Elective	5½	39.31										8.82	12	English	15.12
Total	14	100.										70.56	96	Prescribed	65.62
												29.44	40	Elective	34.38
												100.	136	Total	100.

## UNIVERSITY OF MAINE

BACHELOR OF ARTS															
Entrance Requirements								Graduation Requirements							
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years
														12 Military Sci.	
														6 Physical Tr.	8.61
Mathematics	2½	17.22													3.45
History	1	6.90													
Languages	4	27.60										5.61	6	Languages	16.60
English	3	20.70										7.48	8	English	14.09
Prescribed	10½	72.40										13.09	14	Prescribed	42.75
Elective	4	27.60										86.91	93	Elective	57.25
Total	14½	100.										100.	107	Total	100.

## UNIVERSITY OF MICHIGAN

BACHELOR OF ARTS															
Entrance Requirements								Graduation Requirements							
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years
Mathematics	2	13.33													6.66
Science	1	6.66													3.33
Languages	2	13.33													6.66
English	3	20.00										5.00	6	English	12.50
Prescribed	8	53.33										5.00	6	Prescribed	29.16
Elective	7	46.67										95.00	114	Elective	70.84
Total	15	100.										100.	120	Total	100.

BACHELOR OF ARTS AND TEACHERS DIPLOMA															
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years
Mathematics	2	13.33										9.16	11	Education	4.58
Science	1	6.66													6.66
Languages	2	13.33													3.33
English	3	20.00										5.00	6	English	12.50
Prescribed	8	53.33										14.16	17	Prescribed	33.73
Elective	7	46.67										85.84	103	Elective	66.27
Total	15	100.										100.	120	Total	100.

## UNIVERSITY OF MINNESOTA

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mths.	Subject	
												10.00	12	Science	5.00
Mathematics	.2	13.33													6.66
Languages	4	26.66													13.33
English	3	20.00										5.00	6	English	12.50
Prescribed	9	60.00										15.00	18	Prescribed	37.50
Elective	6	40.00										85.00	102	Elective	62.50
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS IN EDUCATION

												12.50	15	Education	6.25
												5.00	6	Psychology	2.50
												10.00	12	Science	5.00
Mathematics	2	13.33													6.66
Languages	4	26.66													13.33
English	3	20.00										5.00	6	English	12.50
Prescribed	9	60.00										32.50	39	Prescribed	46.25
Elective	6	40.00										67.50	81	Elective	53.75
Total	15	100.										100.	120	Total	100.

## UNIVERSITY OF MISSISSIPPI

## BACHELOR OF ARTS AND BACHELOR OF SCIENCE

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mths.	Subject	
												3.07	4	Psychology	1.53
												13.84	18	Science	6.92
												9.23	12	Languages	4.61
Mathematics	2½	17.86										4.61	6	Mathematics	11.23
History	2	14.28										6.15	8	Social Science	10.22
English	3	21.42										9.23	12	English	15.32
Prescribed	7½	53.56										46.13	60	Prescribed	49.84
Elective	6½	46.44										53.87	70	Elective	50.16
Total	14	100.										100.	130	Total	100.

## BACHELOR OF ARTS IN EDUCATION AND BACHELOR OF SCIENCE IN EDUCATION

												12.30	16	Education	6.15
												7.69	10	Psychology	3.84
												18.46	24	Science	9.23
												4.61	6	Mathematics	2.31
												3.07	4	History	1.53
English	3	21.42										9.23	12	Languages	4.61
Prescribed	3	21.42										9.23	12	English	15.32
Elective	11	78.58										64.59	84	Prescribed	43.00
Total	14	100.										100.	130	Total	100.

## UNIVERSITY OF MISSOURI

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject		
												8.19	10	Science		4.09
												4.10	5	History		2.05
Mathematics	1	6.66										2.46	3	Mathematics		4.56
Languages	2	13.33										8.19	10	Languages		10.76
English	3	20.00										4.91	6	English		12.46
Prescribed	6	40.00										27.85	34	Prescribed		33.92
Elective	9	60.00										72.15	88	Elective		66.08
Total	15	100.										100.	122	Total		100.

BACHELOR OF SCIENCE IN EDUCATION																
												20.00	24	Education		10.00
												8.33	10	Science		4.16
												4.16	5	History		2.08
Mathematics	1	6.66										2.50	3	Mathematics		4.58
Languages	2	13.33										8.33	10	Languages		10.83
English	3	20.00										5.00	6	English		12.50
Prescribed	6	40.00										48.32	58	Prescribed		44.16
Elective	9	60.00										51.68	62	Elective		55.84
Total	15	100.										100.	120	Total		100.

## UNIVERSITY OF MONTANA

BACHELOR OF ARTS (MINIMUM SCHEDULE)																
Entrance Requirements								Graduation Requirements								Percent of time in 8 years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of time	Sem. Hrs.	Subject		
													2	Physical Culture	6.66	
Mathematics	2	13.33													6.66	
Science	1	6.66										5.00	6	Science	5.84	
History	1	6.66													3.33	
Languages	2	13.33										10.00	12	Languages	11.66	
English	4	26.66										5.00	6	English	15.84	
Prescribed	10	66.66										20.00	24	Prescribed	43.33	
Elective	5	33.34										80.00	96	Elective	56.67	
Total	15	100										100	120	Total	100	

## UNIVERSITY OF NEBRASKA

BACHELOR OF ARTS AND BACHELOR OF SCIENCE																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject			
Mathematics	2	13.33												4	Military Science		6.66
Science	1	6.66															3.33
History	1	6.66															3.33
Languages	3	20.00															10.00
English	2	13.33										3.30	4	English			8.31
Prescribed	9	60.00										3.30	4	Prescribed			31.65
Elective	6	40.00										96.70	117	Elective			69.35
Total	15	100.										100.	121	Total			100.
BACHELOR OF ARTS OR BACHELOR OF SCIENCE AND TEACHERS COLLEGE DIPLOMA AND UNIVERSITY TEACHERS CERTIFICATE																	
														4	Military Science		
												12.40	15	Education			6.20
												4.96	6	Psychology			2.48
Mathematics	2	13.33															6.66
Science	1	6.66															3.33
History	1	6.66															3.33
Languages	3	20.00															10.00
English	2	13.33										3.30	4	English			8.31
Prescribed	9	60.00										20.67	25	Prescribed			40.33
Elective	6	40.00										79.33	96	Elective			59.67
Total	15	100.										100.	121	Total			100.

## NEW HAMPSHIRE COLLEGE

BACHELOR OF SCIENCE																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject			
Mathematics	2	13.33															6.66
Science	1	6.66															3.33
Social Science	1	6.66															3.33
English	3	20.00										4.54	6	English			12.27
Prescribed	7	46.66										4.54	6	Prescribed			25.60
Elective	8	53.34										95.46	126	Elective			74.40
Total	15	100.										100.	132	Total			100.

## RUTGER'S COLLEGE

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Percent of Time in 8 Years		
													8	Physical Tr.			
												1.51	2	Art	.75		
												1.51	2	Bible	.75		
												4.54	6	Psychology	2.27		
												6.06	8	Science	3.03		
Mathematics	3	20.00										6.06	8	Mathematics	13.03		
History	1	6.66										12.12	16	Social Science	9.39		
Languages	7	46.66										16.65	22	Languages	31.65		
English	3	20.00										6.06	8	English	13.03		
Prescribed	14	93.33										59.05	78	Prescribed	76.19		
Elective	1	66.67										40.95	54	Elective	23.81		
Total	15	100										100	132	Total	100		

## BACHELOR OF LETTERS

																		8	Physical Tr.		
																		1.51	2	Art	.75
																		1.51	2	Bible	.75
																		4.54	6	Psychology	2.27
																		4.54	6	Philosophy	2.27
																		6.06	8	Science	3.03
Mathematics	3	20.00																6.06	8	Mathematics	13.03
History	1	6.66																12.12	16	Social Science	9.39
Languages	7	46.66																16.65	22	Languages	31.65
English	3	20.00																6.06	8	English	13.03
Prescribed	14	93.33																59.05	78	Prescribed	76.19
Elective	1	6.67																40.95	54	Elective	23.81
Total	15	100																100	132	Total	100

## BACHELOR OF SCIENCE

															9	Military Training		
															4.54	6	Psychology	2.27
															4.54	6	Philosophy	2.27
															1.51	2	Art	.75
															3.03	4	Drafting	1.51
Mathematics	3	20.00													6.06	8	Mathematics	13.03
Science	3	20.00													12.12	16	Science	16.06
History	3	20.00													12.12	16	Social Science	16.06
Languages	3	20.00													10.59	14	Languages	15.29
English	3	20.00													6.06	8	English	13.03
Prescribed	15	100.													60.57	80	Prescribed	80.28
Elective	0														39.43	55	Elective	19.72
Total	15	100.													100.	135	Total	100.



## UNIVERSITY OF NEW MEXICO

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										PerCent of Time in 8 Years
Subject	Units	PerCent of Time	30	60	40	20	0	20	40	60	80	PerCent of Time	Sem.Hrs	Subject						
Mathematics	2	13.33													6.66					
Science	1	6.66													3.33					
History	1	6.66										20.00	24	Social Science	13.33					
Languages	2	13.33										11.66	14	Languages	12.50					
English	3	20.00										10.00	12	English	15.00					
Prescribed	9	60.00										41.66	50	Prescribed	50.83					
Elective	6	40.00										58.34	70	Elective	49.17					
Total	15	100.										100.	120	Total	100.					

## BACHELOR OF PEDAGOGY AND PROFESSIONAL STATE CERTIFICATE

Mathematics	2	13.33										7.01	9	Psychology	3.51
Science	1	6.66													6.66
History	1	6.66										9.38	12	Social Science	8.02
Languages	2	13.33										10.93	14	Languages	12.13
English	3	20.00										9.38	12	English	14.69
Prescribed	9	60.00										36.70	47	Prescribed	48.33
Elective	6	40.00										63.30	81	Elective	51.67
Total	15	100.										100.	128	Total	100.

## CORNELL UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							PerCent of Time in 8 Years	
Subject	Units	PerCent of Time	80	60	40	20	0	20	40	60	80	PerCent of Time	Sem.Hrs		Subject
												5.00	6	Science	2.50
Mathematics	2	13.33													6.66
History	1	6.66													3.33
Languages	5	33.33										5.00	6	Languages	19.16
English	3	20.00													10.00
Prescribed	11	73.32										10.00	12	Prescribed	41.66
Elective	4	26.68										90.00	108	Elective	58.34
Total	15	100										100.	120	Total	100.

## UNIVERSITY OF NEVADA

## BACHELOR OF ARTS (OR OF SCIENCE)

Entrance Requirements								Graduation Requirements								Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	30	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs	Subject		
													4	Military Science		
												5.00	6	Languages	2.50	
Mathematics	2	13.13													6.66	
English	3	20.00										5.00	6	English	12.50	
Prescribed	5	33.33										10.00	12	Prescribed	21.66	
Elective	10	66.67										90.00	108	Elective	78.34	
Total	15	100										100.	120	Total	100.	

## BACHELOR OF ARTS AND TEACHERS HIGH SCHOOL DIPLOMA

Mathematics	2	13.33										15.00	18	Education	7.50
English	3	20.00										5.00	6	Languages	2.50
Prescribed	5	33.33										5.00	6	English	6.66
Elective	10	66.67										25.00	30	Prescribed	12.50
Total	15	100										75.00	90	Elective	29.16
Total	15	100										100.	120	Total	70.84
Total	15	100										100.	120	Total	100.

## UNIVERSITY OF NORTH CAROLINA

## 1. BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.		Subject
Mathematics	2.5	17.86										6.66	8	Mathematics	12.26
History	1.	7.14													3.57
Languages	5.7	40.71										23.32	28	Languages	32.01
English	3.	21.42										11.66	14	English	16.54
Prescribed	12.2	87.13										41.65	50	Prescribed	64.39
Elective	1.8	12.87										58.35	70	Elective	35.61
Total	14.0	100										100.	120	Total	100.

## 2. BACHELOR OF ARTS

Mathematics	2.5	17.86										6.66	8	Mathematics	12.26
History	1.	7.14										5.00	6	History	6.07
Languages	5.7	40.71										21.66	26	Languages	31.18
English	3.	21.42										11.66	14	English	16.54
Prescribed	12.2	87.13										45.00	54	Prescribed	66.06
Elective	1.8	12.87										55.00	66	Elective	33.94
Total	14.	100.										100.	120	Total	100.

## 3. BACHELOR OF ARTS

Mathematics	2.5	17.86										6.66	8	Mathematics	12.66
Science	1.	7.14										10.00	12	Science	8.57
History	1.	7.14										5.00	6	History	6.07
Languages	4.	28.56										10.00	12	Languages	19.28
English	3.	21.42										11.66	14	English	16.54
Prescribed	11.5	82.13										43.32	52	Prescribed	62.72
Elective	2.5	17.87										56.68	68	Elective	37.28
Total	14.	100.										100.	120	Total	100.

## BACHELOR OF ARTS IN EDUCATION

Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem.Hrs.		Subject
												33.33	40	Education	16.66
												5.00	6	Science	2.50
Mathematics	2.5	17.86										6.66	8	Mathematics	12.26
History	1.	7.14										5.00	6	History	6.07
Languages	5.7	40.71										15.00	18	Languages	27.85
English	3.	21.42										10.00	12	English	15.71
Prescribed	12.2	87.13										75.00	90	Prescribed	81.06
Elective	1.8	12.87										25.00	30	Elective	18.94
Total	14.	100.										100.	120	Total	100.

## UNIVERSITY OF NORTH DAKOTA

BACHELOR OF ARTS OR BACHELOR OF SCIENCE																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Units	Percent of Time	in 8 Years
													3	Physical Tr.			
												.82	1	Math. Lectures		.41	
												13.11	16	Science		6.55	
												8.19	10	Languages		4.09	
Mathematics	1	6.66														3.33	
English	3	20.00										8.19	10	English		14.10	
Prescribed	4	26.66										30.32	37	Prescribed		28.48	
Elective	11	73.34										69.68	85	Elective		71.52	
Total	15	100.										100.	122	Total		100.	
BACHELOR OF ARTS AND BACHELORS DIPLOMA IN EDUCATION																	
													3	Physical Tr.			
												.82	1	Math. Lectures		.41	
												16.40	20	Education		8.20	
												13.11	16	Science		6.55	
												13.11	16	Languages		6.55	
Mathematics	1	6.66														3.33	
English	3	20.00										8.19	10	English		14.10	
Prescribed	4	26.66										57.63	63	Prescribed		39.14	
Elective	11	73.34										48.37	59	Elective		60.86	
Total	15	100.										100	122	Total		100.	

## OHIO STATE UNIVERSITY

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Units	Percent of Time	in 8 Years
Mathematics	2	13.33														6.66	
Science	1	6.66										15.00	18	Science		10.83	
History	1	6.66										10.00	12	Social Science		8.33	
Languages	4	26.66										13.33	16	Languages		20.00	
English	3	20.00										3.33	4	English		11.66	
Prescribed	11	73.33										41.66	50	Prescribed		57.50	
Elective	4	26.67										58.34	70	Elective		42.50	
Total	15	100.										100.	120	Total		100.	
BACHELOR OF SCIENCE IN EDUCATION																	
												18.33	22	Education		9.16	
												5.00	6	Psychology		2.50	
Mathematics	2	13.33														6.66	
Science	1	6.66										6.66	8	Science		6.66	
History	1	6.66										10.00	12	Social Science		8.33	
Languages	4	26.66										13.33	16	Languages		20.00	
English	3	20.00										8.33	10	English		14.17	
Prescribed	11	73.33										61.66	74	Prescribed		67.50	
Elective	4	26.67										38.34	46	Elective		32.50	
Total	15	100.										100.	120	Total		100.	

## OHIO UNIVERSITY (ATHENS)

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements						Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject			
Mathematics	2	13.33														6.66	
Science	1	6.66										15.00	18	Science		10.83	
History	1	6.66										10.00	12	Social Science		8.33	
Languages	4	26.66										13.33	16	Languages		20.00	
English	3	20.00										5.00	6	English		12.50	
Prescribed	11	73.33										43.33	52	Prescribed		58.33	
Elective	4	26.67										56.67	68	Elective		41.67	
Total	15	100.										100.	120	Total		100	

## MIAMI UNIVERSITY, OHIO

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements						Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject			
														4	Physical Ed.		
												5.00	6	Psychology		2.50	
Science	1	6.66										6.66	8	Science		6.66	
Mathematics	2	13.33														6.66	
History	1	6.66										10.00	12	Social Science		8.33	
Languages	2	13.33										11.66	14	Languages		12.50	
English	3	20.00										5.00	6	English		12.50	
Prescribed	9	60.00										38.33	46	Prescribed		49.17	
Elective	6	40.00										61.67	74	Elective		50.83	
Total	15	100.										100.	120	Total		100.	

BACHELOR OF SCIENCE AND FOUR-YEAR HIGH SCHOOL PROVISIONAL CERTIFICATE COURSE A-ENGLISH AND HISTORY																	
Entrance Requirements									Graduation Requirements						Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject			
												28.33	34	Education		14.16	
Science	1	6.66										6.66	8	Science		6.66	
Mathematics	2	13.33														6.66	
History	1	6.66										21.66	26	History		14.16	
Languages	2	13.33										13.33	16	Languages		13.33	
English	3	20.00										26.66	32	English		23.33	
Prescribed	9	60.00										96.66	116	Prescribed		78.33	
Elective	6	40.00										3.34	4	Elective		21.67	
Total	15	100.										100.	120	Total		100.	

## UNIVERSITY OF OKLAHOMA

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	Percent of Time in 8 Years		
														2	Physical Ed.		6.66
Mathematics	2	13.33															
History	1	6.66												3.28	4	Social Science	4.97
Science	1	6.66												6.55	8	Science	6.60
Languages	2	13.33												6.55	8	Languages	9.94
English	3	20.00												6.55	8	English	13.27
Prescribed	9	60.00												22.93	28	Prescribed	41.45
Elective	6	40.00												77.07	94	Elective	58.55
Total	15	100.												100.	122	Total	100.

BACHELOR OF ARTS AND PERMANENT STATE TEACHERS' CERTIFICATE																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	Percent of Time in 8 Years		
														4	Physical Tr.		
														15.62	20	Education	7.81
														3.12	4	Psychology	1.56
Mathematics	2	13.33															6.66
History	1	6.66												3.12	4	Social Science	4.90
Science	1	6.66												6.24	8	Science	6.45
Languages	2	13.33												6.24	8	Languages	9.78
English	3	20.00												6.24	8	English	13.12
Prescribed	9	60.00												40.60	52	Prescribed	50.30
Elective	6	40.00												59.40	76	Elective	49.70
Total	15	100.												100.	128	Total	100.

## UNIVERSITY OF OREGON

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	Percent of Time in 8 Years		
Mathematics	2	13.33															6.66
Science	1	6.66															3.33
History	1	6.66															3.33
Languages	2	13.33												11.66	14	Languages	12.50
English	3	20.00												5.00	6	English	12.50
Prescribed	9	60.00												16.66	20	Prescribed	38.33
Elective	6	40.00												83.34	100	Elective	61.67
Total	15	100.												100.	120	Total	100.

BACHELOR OF ARTS AND ONE-YEAR STATE CERTIFICATE																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	Percent of Time in 8 Years		
														1.66	2		.83
														14.66	17	Education	7.08
														2.50	3	Psychology	1.25
Mathematics	2	13.33															6.66
History	1	6.66												7.50	9	Social Science	7.08
Science	1	6.66															3.33
Languages	2	13.33															6.66
English	3	20.00												2.50	3	English	11.25
Prescribed	9	60.00												28.33	34	Prescribed	44.16
Elective	6	40.00												71.67	86	Elective	55.84
Total	15	100.												100.	120	Total	100.

## BACHELOR OF ARTS

BACHELOR OF ARTS																
Entrance Requirements									Graduation Requirements							Percent of Time in 8 Years
Subject	Units	Percent of Time		80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject	
														5	Military Drill	
													.76	1	Bibliography	.38
													.76	1	Art	.38
													2.27	3	Education	1.14
													4.54	6	Philosophy	2.27
													4.54	6	Science	2.27
Mathematics	2	14.28														7.14
History	1	7.14											11.35	15	Social Science	9.24
Languages	4	28.57											27.25	36	Languages	27.91
English	3	21.42											11.35	15	English	16.39
Prescribed	10	71.42											62.83	83	Prescribed	67.12
Elective	4	18.58											37.17	49	Elective	32.88
Total	14	100.											100.	132	Total	100.

BACHELOR OF ARTS AND BACHELOR OF SCIENCE

BACHELOR OF ARTS AND BACHELOR OF SCIENCE																
Entrance Requirements							Graduation Requirements							Percent of Time in Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem.Hrs.	Subject		
Industries	2	12.50													6.25	
Mathematics	2	12.50													6.25	
Science	1	6.25													3.12	
History	1	6.25													3.13	
Languages	3	18.75										8.33	10	Spanish	13.54	
English	3	18.75										5.00	6	English	11.87	
Prescribed	12	75.00										13.33	16	Prescribed	44.12	
Elective	4	25.00										8.67	104	Elective	55.88	
Total	16	100.										100.	120	Total	100.	

## UNIVERSITY OF SOUTH CAROLINA

BACHELOR OF ARTS OR BACHELOR OF SCIENCE																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject			
												8.69	4	Gymnastics			
												8.69	12	Languages			4.35
Mathematics	3	21.42										8.69	12	Mathematics			15.06
Science	1	7.14										4.35	6	Science			5.74
History	3	21.42										8.69	12	History			15.06
English	3	21.42										8.69	12	English			15.06
Prescribed	10	71.42										39.12	54	Prescribed			55.27
Elective	4	28.58										60.88	84	Elective			44.73
Total	14	100.										100.	138	Total			100.

## BACHELOR OF ARTS IN EDUCATION

													4	Gymnastics			
												21.73	30	Education			10.87
												2.17	3	Psychology			1.08
												8.69	12	Languages			4.35
Mathematics	3	21.42										8.69	12	Mathematics			15.06
Science	1	7.14										8.69	12	Science			7.91
History	3	21.42										8.69	12	History			15.06
English	3	21.42										8.69	12	English			15.06
Prescribed	10	71.42										67.36	93	Prescribed			69.39
Elective	4	28.58										32.64	45	Elective			30.61
Total	14	100.										100.	138	Total			100.

## UNIVERSITY OF SOUTH DAKOTA

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject			
												9.37	12	Languages			4.68
Mathematics	2	13.33															6.66
English	3	20.00										4.68	6	English			12.34
Prescribed	5	33.33										14.05	18	Prescribed			23.69
Elective	10	66.67										85.95	110	Elective			76.31
Total	15	100.										100.	128	Total			100.

## UNIVERSITY OF TENNESSEE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mths.	Subject	Units	Per Cent of Time	80	60	40	
Mathematics	2½	17.86										5.00	6	Mathematics	11.43					
Languages	4	28.57										10.00	12	Languages	19.28					
English	3	21.42										10.00	12	English	15.71					
Prescribed	9½	67.85										25.00	30	Prescribed	46.42					
Elective	4½	32.15										75.00	90	Elective	53.58					
Total	14	100.										100.	120	Total	100.					

## BACHELOR OF ARTS OR BACHELOR OF SCIENCE IN EDUCATION

												15.00	18	Education	7.50					
												12.50	3	Philosophy	1.25					
												5.00	6	Psychology	2.50					
Mathematics	2½	17.86										18.00	6	Mathematics	11.43					
Languages	4	28.57										10.00	12	Languages	19.28					
English	3	21.42										10.00	12	English	15.71					
Prescribed	9½	67.85										47.50	57	Prescribed	57.67					
Elective	4½	32.15										52.50	63	Elective	42.33					
Total	18	100.										100.	120	Total	100.					

## UNIVERSITY OF TEXAS

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mths.	Subject	Units	Per Cent of Time	80	60	40	
Mathematics	2½	17.86										10.00	12	Science	5.00					
History	2	14.28										5.00	6	Mathematics	11.43					
Languages	3	21.42										5.00	6	Social Science	9.64					
English	3	21.42										10.00	12	Languages	15.71					
Prescribed	10½	75.00										10.00	12	English	15.71					
Elective	3½	25.00										40.00	48	Prescribed	57.50					
Total	14	100.										60.00	72	Elective	42.50					
												100.	120	Total	100.					

## BACHELOR OF ARTS AND TEACHERS' DIPLOMA

												19.04	24	Education	9.52					
												9.52	12	Science	4.76					
Mathematics	2½	17.86										4.76	6	Mathematics	11.31					
History	2	14.28										4.76	6	Social Science	9.52					
Languages	3	21.42										9.52	12	Languages	15.47					
English	3	21.42										9.52	12	English	15.47					
Prescribed	10½	75.00										57.13	72	Prescribed	66.06					
Elective	3½	25.00										42.87	54	Elective	33.94					
Total	14	100.										100.	126	Total	100.					



## UNIVERSITY OF UTAH

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years		
Subject	Units	Percent of Time	20	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject		
														2	Physical Ed.	
												10.00	12	Science		5.00
												12.50	15	Languages		6.25
History	1	6.66														3.33
Mathematics	2	13.33										3.33	4	Mathematics		8.33
English	3	20.00										5.00	6	English		12.50
Prescribed	6	40.00										30.83	37	Prescribed		35.41
Elective	9	60.00										69.17	83	Elective		64.59
Total	15	100.										100.	120	Total		100.

BACHELOR OF ARTS AND TEACHERS' PROFESSIONAL DIPLOMA																
												18.33	22	Education		9.16
												2.50	3	Psychology		1.25
																3.33
History	1	6.66														6.66
Mathematics	2	13.33										5.00	6	English		12.50
English	3	20.00										25.83	31	Prescribed		32.91
Prescribed	6	40.00										74.17	89	Elective		67.09
Elective	9	60.00										100.	120	Total		100.
Total	15	100.														

BACHELOR OF SCIENCE AND TEACHERS' PROFESSIONAL DIPLOMA																
												30.00	36	Education		15.00
																3.33
																6.66
History	1	6.66														
Mathematics	2	13.33														
English	3	20.00										5.00	6	English		12.50
Prescribed	6	40.00										35.00	42	Prescribed		37.50
Elective	9	60.00										65.00	78	Elective		62.50
Total	15	100.										100.	120	Total		100.

## UNIVERSITY OF VERMONT

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
Mathematics	2½	17.22										3.17	4	Debate, etc.	1.58
History	1	6.89										6.34	8	Mathematics	11.78
Languages	7	48.23										15.87	20	Languages	32.05
English	3	20.67										7.93	10	English	14.30
Prescribed	13½	93.01										33.32	42	Prescribed	63.17
Elective	1	6.99										66.68	84	Elective	36.83
Total	14½	100.										100.	126	Total	100.

## BACHELOR OF PHILOSOPHY

Mathematics	2½	17.22										3.17	4	Debate, etc.	1.58
History	1	6.89										6.34	8	Mathematics	11.78
Languages	6	41.34										9.52	12	Languages	25.43
English	3	20.67										7.93	10	English	14.30
Prescribed	12½	86.12										26.97	34	Prescribed	56.54
Elective	2	13.88										73.02	92	Elective	43.46
Total	14½	100.										100.	126	Total	100.

## BACHELOR OF SCIENCE

Mathematics	2½	17.22										3.03	4	Debate, etc.	1.51
Science	1	6.89										10.60	14	Mathematics	13.91
History	1	6.89										18.16	24	Science	12.52
Languages	2	13.78										9.08	12	Languages	11.43
English	3	20.67										7.57	10	English	14.12
Prescribed	9½	65.45										48.44	64	Prescribed	56.94
Elective	5	34.55										51.56		Elective	43.06
Total	14½	100.										100.		Total	100.

## BACHELOR OF SCIENCE IN EDUCATION

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
												15.08	19	Education	7.54
												19.04	24	Other Depts.	9.52
												4.76	6	Science	2.38
												4.76	6	Psychology	2.38
												3.17	4	Debate, etc.	1.58
Mathematics	2½	17.22										6.34	8	Mathematics	11.78
History	1	6.89													3.45
Languages	7	48.23										15.87	20	Languages	32.05
English	3	20.67										7.93	10	English	14.30
Prescribed	13½	93.01										76.97	97	Prescribed	84.99
Elective	1	6.99										23.02	29	Elective	15.01
Total	14½	100.										100.	126	Total	100.

## UNIVERSITY OF VIRGINIA

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject			
												10.00	12	Philosophy	5.00		
												20.00	24	Science	10.00		
Mathematics	2½	17.86										10.00	12	Mathematics	13.93		
History	1	7.14										10.00	12	Social Science	8.57		
Languages	4	28.57										15.00	18	Languages	21.78		
English	3	21.42										15.00	18	English	18.21		
Prescribed	10½	75.00										80.00	96	Prescribed	77.50		
Elective	3½	25.00										20.00	24	Elective	22.50		
Total	14	100.										100.	120	Total	100.		

## BACHELOR OF SCIENCE

												10.00	12	Philosophy	5.00
												20.00	24	Science	10.00
Mathematics	2½	17.86										10.00	12	Mathematics	13.93
History	1	7.14										10.00	12	Social Science	8.57
Languages	4	28.57										15.00	18	Languages	21.78
English	3	21.42										15.00	18	English	18.21
Prescribed	10½	75.00										80.00	96	Prescribed	77.50
Elective	3½	25.00										20.00	24	Elective	22.50
Total	14	100.										100.	120	Total	100.

## BACHELOR OF SCIENCE IN A SPECIAL SUBJECT

												20.00	24	Science	10.00
												10.00	12	Mathematics	13.93
Mathematics	2½	17.86													3.57
History	1	7.14													19.28
Languages	4	28.57													15.71
English	3	21.42													62.50
Prescribed	10½	75.00										50.00	60	Prescribed	67.25
Elective	3½	25.00										50.00	60	Elective	37.50
Total	14	100.										100.	120	Total	100.

## COLLEGE OF WILLIAM AND MARY

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject
												2.50	3	Ethics, &c.
												5.00	6	Psychology
												12.50	15	Science
Mathematics	2½	17.86										5.82	7	Mathematics
History	1	7.14										8.33	10	Social Science
Latin	3	21.42										20.00	24	Languages
English	3	21.42										12.50	15	English
Prescribed	9½	67.84										66.66	80	Prescribed
Elective	4½	32.16										33.34	40	Elective
Total	14	100.										100.	120	Total

## BACHELOR OF SCIENCE

												5.00	6	Psychology	2.50
												8.33	10	Mathematics	13.09
Mathematics	2½	17.86										6.66	8	Social Science	6.90
History	1	7.14										29.15	35	Science	18.18
Science	1	7.14										10.00	12	Languages	12.14
Languages	2	14.28										7.50	9	English	14.45
English	3	21.42													67.25
Prescribed	9½	67.84										66.66	80	Prescribed	67.25
Elective	4½	32.16										33.34	40	Elective	32.75
Total	14	100.										100.	120	Total	100.

Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years	
Subject	Units	Percent of Time	30	60	40	27	0	20	40	60	80	Percent of Time	Sem. No.		Subject
Mathematics	2	13.33											4	Military Science	6.66
History	1	6.66										6.45	8	Social Science	6.55
Science	1	6.66										6.45	8	Science	6.55
Languages	2	13.33										16.12	20	Languages	14.73
English	3	20.00										8.06	10	English	14.03
Prescribed	9	60.00										37.08	46	Prescribed	48.54
Elective	6	40.00										62.92	78	Elective	51.46
Total	15	100.										100.	124	Total	100.

## UNIVERSITY OF WISCONSIN

## BACHELOR OF ARTS

BACHELOR OF ARTS																	
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Units	Percent of Time	
													8	Military Science			
Mathematics	2	14.28														7.14	
Languages	6	42.84															
English	2	14.28										13.33	16	Languages		28.08	
Prescribed	10	71.42										5.00	6	English		9.64	
Elective	4	28.58										18.33	22	Prescribed		44.87	
Total	14	100.										81.67	98	Elective		55.13	
												100.	120	Total		100.	

## UNIVERSITY OF WYOMING

## BACHELOR OF ARTS

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements							Percent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Units	Percent of Time	
														3	Military Drill		
Mathematics	2	13.33														6.66	
History	2	13.33														6.66	
Science	1	6.66														3.33	
Languages	2	13.33														6.66	
English	3	20.00														6.66	
Prescribed	10	66.66										4.87	6	English		12.43	
Elective	5	33.34										4.87	6	Prescribed		35.76	
Total	15	100.										95.13	117	Elective		64.24	
												100.	123	Total		100.	

## BACHELOR OF ARTS IN EDUCATION (FOR HIGH SCHOOL TEACHERS)

Entrance Requirements													Graduation Requirements													Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Units	Percent of Time										
													3	Military Drill												
												21.13	26	Education	10.57											
Mathematics	2	13.33														6.66										
History	2	13.33										4.87	6	Political Economy	9.10											
Science	1	6.66										4.87	6	Science	5.77											
Languages	2	13.33														6.66										
English	3	20.00										4.87	6	English	12.43											
Prescribed	10	66.66										35.76	44	Prescribed	51.31											
Elective	5	33.34										64.24	79	Elective	48.79											
Total	15	100.										100.	123	Total	100.											

## PART II. NON-STATE, OR PRIVATELY ENDOWED INSTITUTIONS

## AMHERST COLLEGE

BACHELOR OF ARTS															
Entrance Requirements								Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
												9.83	12	Science	4.91
Mathematics	2½	17.86										6.56	8	Mathematics	12.21
History	1	7.14													3.57
Languages	5	35.70										9.83	12	Languages	22.77
English	3	21.42										4.91	6	English	13.16
Prescribed	11½	82.13										31.14	38	Prescribed	56.63
Elective	2½	17.86										68.85	84	Elective	43.37
Total	14	100.										100.	122	Total	100.

## BAKER UNIVERSITY

BACHELOR OF ARTS															
Entrance Requirements								Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
Mathematics	2½	16.66										5.00	6	Mathematics	10.00
Science	1	6.66										10.00	12	Science	8.33
History	1	6.66													3.33
Languages	3	20.00										10.00	12	Languages	15.00
English	3	20.00										10.00	12	English	15.00
Prescribed	10½	70.00										35.00	42	Prescribed	52.50
Elective	4½	30.00										65.00	78	Elective	47.50
Total	15	100.										100.	120	Total	100.

## BELOIT COLLEGE

BACHELOR OF ARTS AND BACHELOR OF SCIENCE															
Entrance Requirements								Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
													4	Physical Tr.	.83
												1.66	2	Bible	.83
Mathematics	2	13.33													6.66
History	1	6.66													3.33
Science	1	6.66										5.00	6	Science	5.83
Languages	2	13.33										10.00	12	Languages	11.66
English	3	20.00										3.33	4	English	11.66
Prescribed	9	60.00										20.00	24	Prescribed	40.00
Elective	6	40.00										80.00	96	Elective	60.00
Total	15	100.										100.	120	Total	100.

## BOWDOIN COLLEGE

BACHELOR OF ARTS																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject		
Mathematics	2½	17.22														8.61
History	1	6.90														3.45
Latin	3	20.70														
English	3	20.70										11.76	14	Languages		16.23
Prescribed	9½	65.52										5.88	8	English		13.29
Elective	5	34.48										17.64	22	Prescribed		41.58
Total	14½	100.										82.36	98	Elective		58.42
												100.	120	Total		100.

BACHELOR OF SCIENCE																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject		
Mathematics	2½	17.22										5.88	8	Mathematics		11.55
History	1	6.90														3.45
Languages	2	13.80										11.76	14	Languages		12.78
English	3	20.70										5.88	8	English		13.29
Prescribed	8½	58.62										23.52	30	Prescribed		41.07
Elective	6	41.38										76.48	90	Elective		58.93
Total	14½	100.										100.	120	Total		100.

## BROWN UNIVERSITY

BACHELOR OF ARTS																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject		
												5.00	6	Philosophy		2.50
												5.00	6	Science		2.50
Mathematics	2½	17.22										5.00	6	Mathematics		11.11
History	1	6.89										10.00	12	S.S. History		8.44
Languages	5	34.45										20.00	24	Languages		27.23
English	3	20.67										10.00	12	English		15.33
Prescribed	11½	79.23										55.00	66	Prescribed		67.11
Elective	3	20.77										45.00	54	Elective		32.89
Total	14½	100.										100.	120	Total		100.

BACHELOR OF PHILOSOPHY																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject		
												5.00	6	Philosophy		2.50
												10.00	12	Science		5.00
Mathematics	2½	17.22														8.61
History	1	6.89										10.00	12	S.S. History		8.44
Languages	3	20.67										6.66	8	Languages		13.66
English	3	20.67										10.00	12	English		15.33
Prescribed	9½	65.45										41.66	50	Prescribed		53.55
Elective	5	34.55										58.34	70	Elective		46.45
Total	14½	100.										100.	120	Total		100.

## BRYN MAWR COLLEGE

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject		
												8.32	10	Philosophy	4.16	
Mathematics	4	20.00													10.00	
Science	1	5.00											8.33	10	Science	6.66
History	1	5.00													2.50	
Languages	10	50.00											8.33	10	Languages	29.16
English	4	20.00											16.66	20	English	18.33
Prescribed	20	100.											41.65	50	Prescribed	70.82
Elective													58.35	70	Elective	29.18
Total	20	100.											100.	120	Total	100.

## CARLETON COLLEGE

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject		
													6	Physical Tr.		
													2.50	3	Psychology	1.25
Mathematics	2	13.33											6.66	8	Mathematics	10.00
Languages	2	13.33											20.00	24	Languages	16.66
English	3	20.00											5.00	6	English	12.50
Prescribed	7	46.66											34.16	41	Prescribed	40.41
Elective	8	53.34											65.84	79	Elective	59.59
Total	15	100.											100.	120	Total	100.

BACHELOR OF SCIENCE																
Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject		
													2.50	3	Psychology	1.25
													6.66	8	Mathematics	10.00
Mathematics	2	13.33											10.00	12	Languages	11.66
Languages	2	13.33											5.00	6	English	12.50
English	3	20.00											24.16	29	Prescribed	35.41
Prescribed	7	46.66											75.84	91	Elective	64.59
Elective	8	53.34											100.	120	Total	100.



## CATHOLIC UNIVERSITY OF AMERICA—SCHOOL OF PHILOSOPHY

## 1 BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	30	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. hrs.	Subject	
												5.24	8	Religion	2.62
												3.93	6	Education	1.96
												3.93	6	Psychology	1.96
												11.80	18	Philosophy	5.90
Mathematics	3½	17.95										3.93	6	Mathematics	10.94
Science	2	10.26										6.56	10	Science	8.41
History	2	10.26										20.99	32	Social Science	15.62
Languages	9	46.17										15.72	24	Languages	30.94
English	3	15.39										7.87	12	English	11.63
Prescribed	19½	100.										79.50	122	Prescribed	89.75
Elective												20.50	32	Elective	10.25
Total	19½	100.										100.	154	Total	100.

## 2 BACHELOR OF ARTS (ECONOMICS GROUP)

												4.80	8	Religion	2.40
												3.61	6	Psychology	1.81
												7.22	12	Philosophy	3.61
Mathematics	3½	17.95										3.61	6	Mathematics	10.78
Science	2	10.26										6.02	10	Science	8.14
History	2	10.26										33.60	56	Social Science	21.93
Languages	9	46.17										7.22	12	Languages	26.69
English	3	15.39										7.22	12	English	11.31
Prescribed	19½	100.										73.50	122	Prescribed	86.75
Elective												26.50	44	Elective	13.25
Total	19½	100.										100.	166	Total	100.

## 3 BACHELOR OF PHILOSOPHY

												5.26	8	Religion	2.63
												3.94	6	Education	1.97
												3.94	6	Psychology	1.97
												20.39	31	Philosophy	10.19
Mathematics	3½	17.95										3.94	6	Mathematics	10.94
Science	2	10.26										6.58	10	Science	8.42
History	2	10.26										15.78	24	Social Science	13.02
Languages	9	46.17										15.78	24	Languages	30.47
English	3	15.39										7.89	12	English	11.64
Prescribed	19½	100.										83.50	127	Prescribed	91.75
Elective												16.50	25	Elective	8.25
Total	19½	100.										100.	152	Total	100.

## CATHOLIC UNIVERSITY OF AMERICA—SCHOOL OF LETTERS

1 BACHELOR OF ARTS (CLASSICAL GROUP)																
Entrance Requirements								Graduation Requirements						Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Units	Per Cent of Time
												5.26	8	Religion	2.63	
												11.84	18	Philosophy	5.97	
												7.89	12	Science	3.94	
Mathematics	3	18.75										3.94	6	Mathematics	11.34	
History	1	6.25										11.84	18	Social Science	9.05	
Languages	9	56.25										35.53	54	Languages	45.89	
English	3	18.75										7.89	12	English	13.32	
Prescribed	16	100.										84.20	128	Prescribed	92.10	
Elective												15.80	24	Elective	7.90	
Total	16	100.										100.	152	Total	100.	
2 BACHELOR OF ARTS (LATIN HISTORICAL GROUP)																
												5.26	8	Religion	2.63	
												11.84	18	Philosophy	5.97	
												7.89	12	Science	3.94	
Mathematics	3	18.75										3.94	6	Mathematics	11.34	
History	1	6.25										15.79	24	Social Science	11.02	
Languages	9	56.25										31.58	48	Languages	43.91	
English	3	18.75										7.89	12	English	13.32	
Prescribed	16	100.										84.20	128	Prescribed	92.10	
Elective												15.80	24	Elective	7.90	
Total	16	100.										100.	152	Total	100.	
3 BACHELOR OF ARTS (MODERN LANGUAGE GROUP)																
												5.26	8	Religion	2.63	
												11.84	18	Philosophy	5.97	
												7.89	12	Science	3.94	
Mathematics	3	18.75										3.94	6	Mathematics	11.34	
History	1	6.25										11.84	18	Social Science	9.04	
Languages	9	56.25										27.58	42	Languages	41.91	
English	3	18.75										11.84	19	English	15.29	
Prescribed	16	100.										80.20	122	Prescribed	90.10	
Elective												19.80	30	Elective	9.90	
Total	16	100.										100.	152	Total	100.	

## CATHOLIC UNIVERSITY OF AMERICA—SCHOOL OF SCIENCE

## 1 BACHELOR OF ARTS

																		4.76	8	Religion	2.38
																		3.57	6	Philosophy	1.78
Mathematics	3½	18.9																5.95	10	Mathematics	12.42
Science	2	10.8																19.04	32	Science	14.92
History	2	10.8																3.57	6	Social Science	7.18
Languages	8	43.2																7.14	12	Languages	25.17
English	3	16.2																7.14	12	English	11.67
Prescribed	18½	100.																51.17	86	Prescribed	75.50
Elective																		48.79	82	Elective	24.40
Total	18½	100.																100.	168	Total	100.

## 2 BACHELOR OF ARTS PREPARATORY TO MEDICINE

Entrance Requirements							Graduation Requirements										Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	40	40	40	20	0	20	40	40	40	Per Cent of Time	Sem. Hrs.	Subject				
												4.64	8	Religion		2.32		
												3.48	6	Architecture		1.74		
												3.48	6	Philosophy		1.74		
Mathematics	3½	18.9										3.48	6	Mathematics		11.19		
Science	2	10.8										44.15	76	Science		27.97		
History	2	10.8										10.45	18	Social Science		10.62		
Languages	8	43.2										6.96	12	Languages		25.08		
English	3	16.2										3.48	6	English		9.84		
Prescribed	18½	100.										80.20	138	Prescribed		90.10		
Elective												19.80	34	Elective		9.90		
Total	18½	100.										100.	172	Total		100.		

## 3 BACHELOR OF SCIENCE

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## COLORADO COLLEGE

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Semesters	Subject	Percent of Time in 8 Years		
														6	Physical Tr.		
												5.00		6	Philosophy	2.50	
Mathematics	2	13.33										6.66		8	Mathematics	10.00	
Science	2	13.33										5.00		6	Science	9.17	
History	1	6.66										5.00		6	Social Science	5.83	
Languages	4	26.66										10.00		12	Languages	18.33	
English	3	20.00										10.00		12	English	15.00	
Prescribed	12	80.00										41.66		50	Prescribed	60.83	
Elective	3	20.00										58.34		70	Elective	39.17	
Total	15	100.										100.		120	Total	100.	

## COLUMBIA UNIVERSITY

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Semesters	Subject	Percent of Time in 8 Years		
														4	Physical Ed.		
												5.00		6	Philosophy	2.50	
												2.50		3	Nat. Science	1.25	
												5.00		6	History	2.50	
Mathematics	3	20.00										4.16		5	Mathematics	12.08	
Latin	4	26.66										15.00		18	Languages	20.83	
English	3	20.00										8.33		10	English	14.16	
Prescribed	10	66.66										40.00		48	Prescribed	53.33	
Elective	5	33.33										60.00		72	Elective	46.66	
Total	15	100.										100.		120	Total	100.	

## BACHELOR OF SCIENCE

BACHELOR OF SCIENCE																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Semesters	Subject	Percent of Time in 8 Years		
														4	Physical Tr.		
												5.00		6	Philosophy	2.50	
												10.00		12	Languages	5.00	
												5.00		6	History	2.50	
Mathematics	3	20.00										4.16		5	Mathematics	12.08	
Science	2	13.33										6.66		8	Science	10.00	
English	3	20.00										8.33		10	English	14.16	
Prescribed	8	53.33										39.16		47	Prescribed	46.24	
Elective	7	46.66										60.83		73	Elective	53.76	
Total	15	100.										100.		120	Total	100.	

## COLUMBIA UNIVERSITY—SCHOOL OF PRACTICAL ARTS

BACHELOR OF SCIENCE AND TEACHER'S COLLEGE DIPLOMA																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Semesters	Subject	Percent of Time in 8 Years		
														4	Physical Tr.		
												37.50		45	Technology	18.75	
												6.66		8	Science	3.33	
												1.66		2	Hygiene	.83	
												5.00		6	History	2.50	
												5.00		6	Languages	2.50	
English	3	20.00										10.00		12	English	15.00	
Prescribed	3	20.00										65.83		79	Prescribed	42.91	
Elective	12	80.00										34.17		41	Elective	57.09	
Total	15	100.										100.		120	Total	100.	

## DARTMOUTH COLLEGE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Percent of Time in Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject		
													2	Physical Ed.		
Mathematics	2½	17.25										5.00	6	Mathematics	11.11	
History	1	6.89													3.44	
Languages	6	41.34										10.00	12	Languages	25.67	
English	3	20.67										5.00	6	English	12.83	
Prescribed	12½	86.13										20.00	24	Prescribed	53.06	
Elective	2	13.87										80.00	96	Elective	46.93	
Total	14½	100.										100.	120	Total	100.	

## BACHELOR OF SCIENCE

												5.00	2	Physical Ed.	
Mathematics	2½	17.23											6	Mathematics	11.11
Science	1	6.89													3.44
History	1	6.89													3.44
Languages	3-4	20.67										10.00	12	Languages	15.33
English	3	20.67										5.00	6	English	12.83
Prescribed	10½	72.35										20.00	24	Prescribed	46.17
Elective	4-3	27.65										80.00	96	Elective	53.82
Total	14½	100.										100.	120	Total	100.

## DE PAUW UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							Per Cent of Time in Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mos.		Subject
													4	Physical Tr.	
Mathematics	2½	15.62													7.81
History	1	6.25													3.12
Languages	3	18.75													
English	3	18.75										13.33	16	Languages	16.04
Prescribed	9½	59.37										18.33	22	English	18.54
Elective	6½	41.63										31.66	38	Prescribed	45.51
												68.34	82	Elective	54.40
Total	16	100.										100.	120	Total	100.

## EARLHAM COLLEGE

## BACHELOR OF ARTS AND BACHELOR OF SCIENCE

Entrance Requirements								Graduation Requirements								Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mos.	Subject			
Science	1	6.66													3.33		
Social Science	1	6.66													3.33		
Mathematics	2	13.33										3.33	4	Mathematics	8.33		
Languages	2	13.33										15.00	18	Languages	14.16		
English	3	20.00										3.33	4	English	11.67		
Prescribed	9	60.00										21.66	26	Prescribed	40.83		
Elective	6	40.00										78.34	94	Elective	59.17		
Total	15	100.										100.	120	Total	100.		

## BACHELOR OF ARTS (GROUP 1, LATIN)

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	
												5.00	6	Philosophy	2.50
												10.00	12	History	5.00
Mathematics	2½	16.66										5.00	6	Mathematics	10.83
Languages	2	13.33										25.00	30	Languages	19.16
English	3	20.00										10.00	12	English	15.00
Prescribed	7½	50.00										55.00	66	Prescribed	52.50
Elective	7½	50.00										45.00	54	Elective	47.50
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS (GROUP 2, MODERN LANGUAGES)

												5.00	6	Philosophy	2.50
												5.00	6	Science	2.50
												15.00	18	Social Science	7.50
Mathematics	2½	16.66													8.33
Languages	2	13.33										20.00	24	Languages	16.66
English	3	20.00										10.00	12	English	15.00
Prescribed	7½	50.00										55.00	66	Prescribed	52.50
Elective	7½	50.00										45.00	54	Elective	47.50
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS (GROUP 3, NATURAL SCIENCE)

												5.00	6	Philosophy	2.50
												5.00	6	History	2.50
												15.00	18	Science	7.50
Mathematics	2½	16.66										10.00	12	Mathematics	13.33
Languages	2	13.33										10.00	12	Languages	11.66
English	3	20.00										5.00	6	English	12.50
Prescribed	7½	50.00										50.00	60	Prescribed	50.00
Elective	7½	50.00										50.00	60	Elective	50.00
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS (GROUP 4, POLITICAL AND SOCIAL SCIENCE)

												5.00	6	Philosophy	2.50
												25.00	30	Social Science	12.50
Mathematics	2½	16.66										5.00	6	Mathematics	10.83
Languages	2	13.33										10.00	12	Languages	11.66
English	3	20.00										10.00	12	English	15.00
Prescribed	7½	50.00										55.00	66	Prescribed	52.50
Elective	7½	50.00										45.00	54	Elective	47.50
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS (GROUP 5, MEDICAL)

												33.33	40	Science	16.66
												5.00	6	History	2.50
												5.00	6	Philosophy	2.50
Mathematics	2½	16.66										5.00	6	Mathematics	10.83
Languages	2	13.33										10.00	12	Languages	11.66
English	3	20.00										10.00	12	English	15.00
Prescribed	7½	50.00										68.33	82	Prescribed	59.16
Elective	7½	50.00										31.66	38	Elective	40.84
Total	15	100.										100.	120	Total	100.

## BACHELOR OF ARTS AND BACHELOR'S DIPLOMA IN EDUCATION

												16.12	20	Education	8.06
												4.83	6	Psychology	2.41
												4.83	6	Philosophy	2.41
												4.83	6	Biology	2.41
												9.67	12	History	4.84
Mathematics	2½	16.66													8.33
Languages	2	13.33										9.67	12	Languages	11.50
English	3	20.00										4.83	6	English	12.42
Prescribed	7½	50.00										54.80	66	Prescribed	52.40
Elective	7½	50.00										45.20	58	Elective	47.60
Total	15	100.										100.	124	Total	100.

NOTE REGARDING CURRICULUM IN EDUCATION.—If approved secondary work has been done in biology, foreign language (in one language), or history (a survey of world history), college electives may be chosen to the extent of the secondary school credits approved.

## GOUCHER COLLEGE

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Per Cent of Time	20	40	60	80	100	120	20	40	60	80	100	120	Per Cent of Time	Sem. Mths	Subject
															3.33	4	Bible
															2.50	3	Philosophy
															2.50	3	Psychology
															5.00	6	History
															10.00	12	Science
															16.66	20	Languages
English	3	20.00													8.33	10	English
Prescribed	3	20.00													48.32	58	Prescribed
Elective	12	80.00													51.68	62	Elective
Total	15	100.													1.00	120	Total

## GRINNELL COLLEGE

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements								
Subject	Units	Per Cent of Time	20	40	60	80	100	120	20	40	60	80	100	120	Per Cent of Time	Sem. Mths	Subject
Mathematics	2½	16.66													5.00	6	Philosophy
Science	1	6.66													5.00	6	Mathematics
History	1	6.66													5.00	6	Science
Languages	4	26.66													5.00	6	Social Science
English	3	20.00													16.66	20	Languages
Prescribed	11½	76.66													5.00	6	English
Elective	3½	23.34													41.66	50	Prescribed
Total	15	100.													58.34	70	Elective
															100.	120	Total

BACHELOR OF SCIENCE																	
Subject	Units	Per Cent of Time	20	40	60	80	100	120	20	40	60	80	100	120	Per Cent of Time	Sem. Mths	Subject
Mathematics	2½	16.66													5.00	6	Philosophy
Science	1	6.66													5.00	6	Mathematics
History	1	6.66													5.00	6	Science
Languages	2	13.33													5.00	6	Social Science
English	3	20.00													13.33	16	Languages
Prescribed	9½	63.33													5.00	6	English
Elective	5½	36.67													38.33	46	Prescribed
Total	15	100.													61.67	74	Elective
															100.	120	Total



## HAMILTON COLLEGE

## BACHELOR OF ARTS (CLASSICAL COURSE)

Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
												1.61	2	Science	.81
												4.84	6	Bible	2.42
												1.61	2	Ethics	.81
												4.84	6	Mathematics	11.03
Mathematics	2½	17.22													
History	1	6.89													3.44
Languages	6	41.34										29.01	36	Languages	35.17
English	3	20.67										19.34	24	English	20.00
Prescribed	12½	86.12										61.25	76	Prescribed	73.68
Elective	2	13.88										38.75	48	Elective	26.32
Total	14½	100.										100.	124	Total	100.

## BACHELOR OF PHILOSOPHY, OR BACHELOR OF SCIENCE (LATIN-SCIENTIFIC COURSE)

												1.61	2	Science	.81
												4.84	6	Bible	2.42
												1.61	2	Ethics	.81
Mathematics	2½	17.22										4.84	6	Mathematics	11.03
History	1	6.89													3.44
Languages	5	34.45										29.01	36	Languages	31.73
English	3	20.67										19.34	24	English	20.00
Prescribed	11½	79.23										61.25	76	Prescribed	70.24
Elective	3	21.77										38.75	48	Elective	29.76
Total	14½	100.										100.	124	Total	100.

## HARVARD UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements									Graduation Requirements									Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject				
Mathematics	2½	15.15													7.57			
Science	1	6.06													3.03			
History	1	6.06													3.03			
Languages	4	24.24										10.00	12	Languages	17.12			
English	3	18.18										5.00	6	English	11.59			
Prescribed	11½	69.69										15.00	18	Prescribed	42.34			
Elective	5	31.31										85.00	102	Elective	57.66			
Total	16½	100.										100.	120	Total	100.			

## BACHELOR OF SCIENCE

Mathematics	2½	15.15													7.57
Science	1	6.06													3.03
History	1	6.06													3.03
Languages	3	18.18										10.00	12	Languages	14.09
English	3	18.18										5.00	6	English	11.59
Prescribed	10½	63.63										15.00	18	Prescribed	39.37
Elective	6	36.37										85.00	102	Elective	60.60
Total	16½	100.										100.00	120	Total	100.

## HAVERFORD COLLEGE

BACHELOR OF ARTS AND BACHELOR OF SCIENCE															
Entrance Requirements								Graduation Requirements							
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Nos.	Subject	Percent of Time in 8 Years
												2.34	3	Bible	1.17
												2.34	3	Ethics	1.17
												2.34	3	Psychology	1.17
Mathematics	2½	17.22										6.25	8	Mathematics	11.73
History	1	6.89										7.03	9	Social Science	6.96
Languages	4	27.56										18.74	24	Languages	23.15
English	3	20.67										6.25	8	English	13.46
Prescribed	10½	72.34										45.29	58	Prescribed	58.81
Elective	4	27.56										54.71	70	Elective	41.19
Total	14½	100.										100.	128	Total	100.

## JOHNS HOPKINS UNIVERSITY

BACHELOR OF ARTS															
Entrance Requirements								Graduation Requirements							
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Nos.	Subject	Percent of Time in 8 Years
												.60	1	Public Sp.	.40
												4.80	6	Philosophy	2.40
Mathematics	2½	17.25										4.80	6	Social Science	5.85
History	1	6.90										4.80	6	Science	5.85
Science	1	6.90										12.80	16	Languages	30.55
Languages	7	48.30										9.60	12	English	15.15
English	3	20.70										37.60	47	Prescribed	68.80
Prescribed	14½	100.										62.40	78	Elective	31.20
Elective	0											100.	125	Total	100.
Total	14½	100.													

## JOHNS HOPKINS UNIVERSITY AND GOUCHER COLLEGE

BACHELOR OF SCIENCE															
Entrance Requirements								Graduation Requirements							
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Nos.	Subject	Percent of Time in 8 Years
Mathematics	2	13.33										3.33	4	History	5.00
History	1	6.66										5.00	6	Science	5.83
Science	1	6.66										26.66	32	Languages	20.00
Languages	2	13.33										6.66	8	English	13.33
English	3	20.00										41.66	50	Prescribed	50.83
Prescribed	9	60.00										58.33	70	Elective	49.16
Elective	6	40.00										100.	120	Total	100.
Total	15	100.													

NOTE.—The foregoing graph is that of the curriculum in education. The courses in education are a part of the major requirement.

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. No.	Subject		
													2	Physical Tr.		
												6.15	8	Bible	3.07	
												8.45	11	Science	4.23	
Mathematics	2½	17.23										4.61	6	Mathematics	10.92	
History	1	6.91										2.31	3	History	4.61	
Languages	7	48.23										23.07	30	Languages	35.65	
English	3	20.70										4.61	6	English	12.66	
Prescribed	13½	93.08										49.20	64	Prescribed	71.14	
Elective	1	6.92										50.80	66	Elective	28.86	
Total	14½	100.										100.	130	Total	100.	

## BACHELOR OF SCIENCE

[illegible]

## LELAND STANFORD JUNIOR UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years					
English	3	20.00												English	10.00					
Prescribed	3	20.00												Prescribed	10.00					
Elective	12	80.00										100.	120	Elective	90.00					
Total	15	100.										100.	120	Total	100.					

## MUHLENBERG COLLEGE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject						
													4	Physical Tr.						
												10.00	14	Religion	5.00					
												5.71	8	Science	2.85					
												4.28	6	Philosophy	2.14					
												10.00	14	Social Science	5.00					
Mathematics	2½	16.66										7.14	10	Mathematics	11.90					
Languages	6	53.33										25.71	36	Languages	39.52					
English	3	20.00										14.28	20	English	17.14					
Prescribed	13½	90.00										77.13	108	Prescribed	83.56					
Elective	1½	10.00										22.87	32	Elective	16.44					
Total	15	100.										100.	140	Total	100.					

## BACHELOR OF SCIENCE

															4	Physical Tr.		
															10.00	14	Religion	5.00
															4.28	6	Philosophy	2.14
															2.85	4	Social Science	1.42
Mathematics	2½	16.66													7.14	10	Mathematics	11.90
Science	1	6.66													41.42	58	Science	24.04
Languages	3	20.00													15.71	22	Languages	17.86
English	3	20.00													8.57	12	English	14.29
Prescribed	9½	63.33													90.00	126	Prescribed	76.66
Elective	5½	36.67													10.00	14	Elective	23.34
Total	15	100.													100.	140	Total	100.

## BACHELOR OF PHILOSOPHY

															4	Physical Tr.		
															10.00	14	Religion	5.00
															4.28	6	Philosophy	2.14
															5.71	8	Science	2.85
Mathematics	2½	16.66													7.14	10	Mathematics	11.90
History	1	6.66													15.71	22	Social Science	11.18
Languages	5	33.33													25.71	36	Languages	29.52
English	3	20.00													14.28	20	English	17.14
Prescribed	11½	76.66													82.84	116	Prescribed	79.75
Elective	3½	23.34													17.16	24	Elective	20.25
Total	15	100.													100.	140	Total	100.



## OBERLIN COLLEGE

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject			
													2	Physical Tr.			
												3.38	4	Bible		1.69	
												1.69	2	Art		.85	
												2.54	3	Psychology		1.27	
												2.54	3	Philosophy		1.27	
Mathematics	3	20.00														10.00	
Science	1	6.66										5.08	6	Science		5.87	
History	1	6.66										5.08	6	Social Science		5.87	
Languages	4	26.66										6.76	8	Languages		16.71	
English	3	20.00										3.38	4	English		11.69	
Prescribed	12	80.00										30.48	36	Prescribed		55.22	
Elective	3	20.00										69.52	82	Elective		44.78	
Total	15	100.										100.	118	Total		100.	

## UNIVERSITY OF PENNSYLVANIA

BACHELOR OF ARTS																	
Entrance Requirements									Graduation Requirements						Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mos.	Subject			
														8	Physical Ed.		
Mathematics	2½	17.22														8.61	
History	1	6.89														3.44	
Languages	3	20.67										15.00	18	Languages		17.83	
English	3	20.67										10.00	12	English		15.33	
Prescribed	9½	65.45										25.00	30	Prescribed		44.22	
Elective	5	34.55										75.00	90	Elective		55.78	
Total	14½	100.										100.	120	Total		100.	

## UNIVERSITY OF PITTSBURG

## BACHELOR OF ARTS OR BACHELOR OF SCIENCE

BACHELOR OF ARTS OR BACHELOR OF SCIENCE															
Entrance Requirements							Graduation Requirements							PerCent of Time in 8 Years	
Subject	Units	PerCent of Time	30	40	40	20	0	20	40	60	80	PerCent of Time	Sem. lths		Subject
												9.37	12	Physical Ed.	
														Languages	
Mathematics	2	13.33													
History	1	6.66													
English	3	20.00										4.68	6	English	
Prescribed	6	40.00										14.05	18	Prescribed	
Elective	9	60.00										85.95	110	Elective	
Total	15	100.										100.	128	Total	

## BACHELOR OF ARTS AND BACHELOR'S DIPLOMA IN EDUCATION

														Physical Ed.	
												29.67	38	Education	14.83
												3.12	4	Public Sp.	1.56
												3.12	4	Psychology	1.56
												4.68	6	Science	2.34
												18.74	24	Languages	9.37
Mathematics	2	13.33													6.66
History	1	6.66										7.81	10	Social Science	7.23
English	3	20.00										4.68	6	English	12.34
Prescribed	6	40.00										71.82	92	Prescribed	55.90
Elective	9	60.00										28.11	36	Elective	44.05
Total	15	100.										100.	128	Total	100.

## BACHELOR OF SCIENCE AND BACHELOR'S DIPLOMA IN EDUCATION

														Physical Ed.	
												29.67	38	Education	14.83
												3.12	4	Public Sp.	1.56
												3.12	4	Psychology	1.56
												14.05	18	Science	7.02
												9.37	12	Languages	4.68
Mathematics	2	13.33													6.66
History	1	6.66										7.81	10	Social Science	7.23
English	3	20.00										4.68	6	English	12.34
Prescribed	6	40.00										71.82	92	Prescribed	55.90
Elective	9	60.00										28.11	36	Elective	44.05
Total	15	100.										100.	128	Total	100.

## PRINCETON UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject		
													6	Physical Tr.		
												4.67	6	Philosophy	2.38	
												6.34	8	Science	3.17	
Mathematics	2½	15.15										6.34	8	Mathematics	10.74	
Languages	6	36.36										15.87	20	Languages	26.11	
English	3	18.18										3.17	4	English	10.68	
Prescribed	11½	69.69										36.50	46	Prescribed	53.09	
Elective	5	30.31										63.50	80	Elective	46.91	
Total	16½	100.										100.	126	Total	100.	

## BACHELOR OF SCIENCE OR BACHELOR OF LETTERS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject		
													6	Physical Tr.		
												4.76	6	Philosophy	2.38	
												7.93	10	Science	3.96	
Mathematics	2½	15.15										6.34	8	Mathematics	10.74	
Languages	4	24.24										11.11	14	Languages	17.68	
English	3	18.18										3.17	4	English	10.68	
Prescribed	9½	57.57										33.33	42	Prescribed	45.45	
Elective	7	42.43										63.50	84	Elective	44.55	
Total	16½	100.										100.	126	Total	100.	

## RANDOLPH-MACON COLLEGE

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject		
												4.69	6	Bible	2.34	
												4.69	6	Psychology	2.34	
Mathematics	2½	17.86										7.81	10	Mathematics	12.84	
History	1	7.14										4.69	6	History	5.91	
Languages	6	42.85										26.55	34	Languages	34.70	
English	3	21.42										14.05	18	English	17.73	
Prescribed	12½	89.27										62.48	80	Prescribed	75.87	
Elective	1½	10.73										37.52	48	Elective	24.13	
Total	14	100.										100.	128	Total	100.	

## BACHELOR OF SCIENCE

Entrance Requirements					Graduation Requirements										Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject		
												4.69	6	Bible	2.34	
												4.69	6	Psychology	2.34	
Mathematics	2½	17.86										7.81	10	Mathematics	12.84	
History	1	7.14										4.69	6	History	5.91	
Languages	4	28.56										18.74	24	Languages	23.65	
English	3	21.42										14.05	18	English	17.73	
Prescribed	10½	75.00										54.67	70	Prescribed	64.83	
Elective	3½	25.00										45.33	58	Elective	35.17	
Total	14	100.										100.	128	Total	100.	



## SMITH COLLEGE

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										PerCent of Time in 8 Years
Subject	Units	PerCent of Time	80	60	40	20	0	20	40	60	80	PerCent of Time	Sem. Hrs.	Subject	
												3.33	4	Hygiene	1.66
												5.00	6	Bible	2.50
												5.00	6	Philosophy	2.50
Mathematics	2½	17.22													8.61
History	1	6.90										5.00	6	History	5.95
Languages	4	27.60										10.00	12	Languages	18.80
English	3	20.70										5.00	6	English	12.85
Prescribed	10½	72.40										33.33	40	Prescribed	52.87
Elective	4	27.60										66.67	80	Elective	47.13
Total	14½	100.										100.	120	Total	100

## UNIVERSITY OF THE SOUTH

## BACHELOR OF ARTS

Entrance Requirements					Graduation Requirements										PerCent of Time in 8 Years
Subject	Units	PerCent of Time	80	60	40	20	0	20	40	60	80	PerCent of Time	Sem. Hrs.	Subject	
												2.94	4	Bible	1.47
												4.41	6	Ethics	2.21
												4.41	6	Philosophy	2.21
												8.82	12	Social Science	4.41
												4.41	6	Science	2.21
Mathematics	3	21.42										4.41	6	Mathematics	12.92
Latin	4	28.57										27.93	38	Languages	28.25
English	3	21.42										8.82	12	English	15.12
Prescribed	10	71.42										66.15	90	Prescribed	68.83
Elective	4	28.58										33.85	46	Elective	31.17
Total	14	100.										100.	136	Total	100.

## BACHELOR OF SCIENCE

												2.94	4	Bible	1.47
												4.41	6	Ethics	2.21
												4.41	6	Philosophy	2.21
												4.41	6	History	2.21
												17.64	24	Science	8.82
Mathematics	3	21.42										8.82	12	Mathematics	15.12
Languages	4	28.57										17.64	24	Languages	23.10
English	3	21.42										8.82	12	English	15.12
Prescribed	10	71.42										69.09	94	Prescribed	70.25
Elective	4	28.58										30.91	42	Elective	29.75
Total	14	100.										100.	136	Total	100.

## SWARTHMORE COLLEGE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Per Cent of Time in Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject			
												2.42	3	Bible	1.21		
												9.67	12	Languages	4.83		
												4.84	6	Science	2.42		
Mathematics	2½	17.25										4.84	6	Mathematics	11.08		
History	2	13.80													6.90		
English	3	20.70											8.06	10	English	14.35	
Prescribed	7½	51.75											29.83	37	Prescribed	40.79	
Elective	7	48.25											70.17	87	Elective	59.21	
Total	14½	100.										100.	124	Total	100.		

## SYRACUSE UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject			
													4	Gymnastics			
												.83	1	Hygiene	.41		
												1.66	2	Elocution	.83		
Mathematics	2	13.33										5.00	6	Mathematics	9.16		
Science	1	6.66										5.00	6	Science	5.83		
History	1	6.66													3.33		
Languages	5	33.33										15.00	18	Languages	24.17		
English	3	20.00										5.00	6	English	12.50		
Prescribed	12	80.00										32.50	39	Prescribed	56.25		
Elective	3	20.00										67.50	81	Elective	43.75		
Total	15	100.										100.	120	Total	100.		

## BACHELOR OF SCIENCE

													4	Gymnastics	
												.83	1	Hygiene	.41
Mathematics	2	13.33										5.00	6	Mathematics	9.16
Science	2	13.33										5.00	6	Science	9.16
History	1	6.66													3.33
Languages	4	26.66										10.00	12	Languages	18.33
English	3	20.00										5.00	6	English	12.50
Prescribed	12	80.00										25.83	31	Prescribed	52.91
Elective	3	20.00										74.17	89	Elective	47.09
Total	15	100.										100.	120	Total	100.

## TRINITY COLLEGE, NORTH CAROLINA

## BACHELOR OF ARTS (GROUP A)

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject						
												6.25	8	Bible						3.12
Mathematics	3	20.00										4.68	6	Mathematics						12.34
History	1	6.66																		3.33
Languages	4	40.00												9.37	12	Languages				24.68
English	3	20.00												9.37	12	English				14.69
Prescribed	11	86.66												29.67	38	Prescribed				58.16
Elective	4	13.37												70.33	90	Elective				41.84
Total	15	100.										100.	128	Total						100.

## BACHELOR OF ARTS (GROUP B)

												6.25	8	Bible						3.12
Mathematics	3	20.00										4.68	6	Mathematics						12.34
History	1	6.66																		3.33
Languages	4	26.66										14.07	18	Languages						20.36
English	3	20.00										9.37	12	English						14.69
Prescribed	11	73.33										34.37	44	Prescribed						53.85
Elective	4	26.67										65.63	84	Elective						46.15
Total	15	100.										100.	128	Total						100.

## TUFTS COLLEGE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements										Per Cent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject						
														2	Physical Tr.					
												5.00	6	Science						2.50
Mathematics	2	13.33										5.00	6	Mathematics						9.16
History	1	6.66																		3.33
Languages	2	13.33										10.00	12	Languages						11.66
English	3	20.00										5.00	6	English						12.50
Prescribed	8	53.33										25.00	30	Prescribed						39.16
Elective	7	46.66										75.00	90	Elective						61.83
Total	15	100.										100.	120	Total						100.

## BACHELOR OF SCIENCE

														2	Physical Ed.					
												5.00	6	Science						2.50
Mathematics	2	13.33										5.00	6	Mathematics						9.16
History	1	6.66																		3.33
Languages	2	13.33										5.00	6	Languages						9.16
English	3	20.00										5.00	6	English						12.50
Prescribed	8	53.33										20.00	24	Prescribed						36.66
Elective	7	46.66										80.00	96	Elective						63.33
Total	15	100.										100.	120	Total						100.

## TULANE UNIVERSITY OF LOUISIANA

## BACHELOR OF ARTS (CLASSICAL)

BACHELOR OF ARTS (CLASSICAL)																
Entrance Requirements								Graduation Requirements								Per Cent of Time in 4 Years
Subject	Units	Per Cent of Time		80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	
													4.68	6	History	2.34
Mathematics	3	20.00											7.81	10	Mathematics	13.92
Languages	3	20.00											23.43	30	Languages	21.71
English	3	20.00											9.37	12	English	14.68
Prescribed	9	60.00											45.29	58	Prescribed	52.65
Elective	6	40.00											54.71	70	Elective	47.35
Total	15	100.											100.	128	Total	100.

## BACHELOR OF ARTS (LITERARY)

												7.81	10	Science	3.92
Mathematics	3	20.00										7.81	10	Mathematics	13.92
Languages	3	20.00										18.74	24	Languages	19.36
English	3	20.00										9.37	12	English	14.68
Prescribed	9	60.00										43.73	56	Prescribed	51.86
Elective	6	40.00										56.27	72	Elective	48.14
Total	15	100										100.	128	Total	100

## BACHELOR OF SCIENCE (SCIENTIFIC)

												1.41	2	Drawing	.71
History	2	13.33										4.22	6	History	8.77
Science	2	13.33										21.13	30	Science	17.23
Mathematics	3	20.00										14.08	20	Mathematics	17.04
Languages	2	13.33										8.45	12	Languages	10.89
English	3	20.00										8.45	12	English	14.23
Prescribed	12	80.00										57.75	82	Prescribed	68.87
Elective	3	20.00										42.25	60	Elective	31.13
Total	15	100										100	142	Total	100.

## BACHELOR OF ARTS IN EDUCATION

												21.19	28	Education	10.59
												4.54	6	History	2.27
Science	1	6.66										15.20	20	Science	10.93
Mathematics	3	20.00										7.57	10	Mathematics	13.78
Languages	2	13.33										9.08	12	Languages	11.22
English	3	20.00										9.08	12	English	14.54
Prescribed	9	60.00										66.66	88	Prescribed	63.33
Elective	6	40.00										33.34	44	Elective	36.67
Total	15	100.										100.	132	Total	100.

## UNION UNIVERSITY

## BACHELOR OF ARTS (COURSE A)

BACHELOR OF ARTS (COURSE A)																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem.Hrs	Subject		
												2.90	4	Science	1.45	
												2.90	4	History	1.45	
Mathematics	2½	17.86										5.80	8	Mathematics	11.83	
Languages	7	50.00										26.81	37	Languages	38.42	
English	3	21.42										12.31	17	English	16.86	
Prescribed	12½	89.28										50.72	70	Prescribed	70.00	
Elective	1½	10.72										49.28	68	Elective	30.00	
Total	14	100.										100.	138	Total	100.	

## BACHELOR OF ARTS (COURSE B)

												2.90	4	Science	1.45
Mathematics	2½	17.86										5.80	8	Mathematics	11.83
History	2	14.28										2.90	4	History	8.59
Languages	6	42.85										23.91	33	Languages	33.38
English	3	21.42										12.31	17	English	16.86
Prescribed	13½	85.48										47.82	66	Prescribed	72.12
Elective	½	3.58										52.18	72	Elective	27.88
Total	14	100.										100.	138	Total	100.

## BACHELOR OF PHILOSOPHY

												2.90	4	Science	1.45
Mathematics	2½	17.86										5.80	8	Mathematics	11.83
History	2	14.28										5.80	8	History	10.04
Languages	6	42.85										24.63	34	Languages	33.74
English	3	21.42										13.04	18	English	17.23
Prescribed	13½	96.42										52.17	72	Prescribed	74.29
Elective	½	3.58										47.83	66	Elective	25.71
Total	14	100.										100.	138	Total	100.

## BACHELOR OF SCIENCE

Mathematics	3	21.42										11.60	16	Mathematics	16.51
History	1	7.14										5.80	8	History	6.47
Science	1	7.14										11.60	16	Science	9.37
Languages	2	14.28										14.50	20	Languages	14.39
English	3	21.42										13.04	18	English	17.23
Prescribed	10	71.43										56.52	78	Prescribed	63.97
Elective	4	28.57										43.48	60	Elective	36.03
Total	14	100.										100.	138	Total	100.

## VANDERBILT UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject			
							■					4.68	6	Philosophy	2.34		
							■					4.68	6	History	2.34		
							■					9.37	12	Science	4.68		
Mathematics	2½	16.66				■	■					6.25	8	Mathematics	11.45		
Languages	6	40.00				■	■					9.37	12	Languages	24.69		
English	3	20.00				■	■					4.68	6	English	12.33		
Prescribed	11½	76.66	■	■	■	■	■	■	■	■	■	39.05	50	Prescribed	57.85		
Elective	3½	23.34				■	■	■	■	■	■	60.95	78	Elective	42.15		
Total	15	100.										100.	128	Total	100.		

## BACHELOR OF SCIENCE

ENTRANCE REQUIREMENTS															GRADUATION REQUIREMENTS															PER CENT OF TIME IN 8 YEARS																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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## VASSAR COLLEGE

## BACHELOR OF ARTS

Entrance Requirements										Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years		
							■					2.72	3	Philosophy	1.36		
							■					5.45	6	Science	2.72		
Mathematics	3	20.00				■	■					5.45	6	Mathematics	12.72		
History	1	6.66				■	■					5.45	6	History	6.06		
Languages	7	46.66				■	■					10.90	12	Languages	28.78		
English	3	20.00				■	■					5.45	6	English	12.72		
Prescribed	14	93.33	■									35.45	39	Prescribed	64.39		
Elective	1	6.66				■	■	■	■	■	■	64.55	72	Elective	35.60		
Total	15	100.										100.	111	Total	100.		

## WASHINGTON UNIVERSITY, ST. LOUIS, MO.

## BACHELOR OF ARTS

Entrance Requirements								Graduation Requirements						Per Cent of Time in 8 Years	
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years
Mathematics	2½	16.66				■	■								8.33
History	1	6.66				■	■								3.33
Science	1	6.66				■	■					5.00	6	Science	5.83
Languages	5	33.33				■	■					10.00	12	Languages	21.66
English	3	20.00				■	■					10.00	12	English	15.00
Prescribed	12½	83.33	■	■	■	■	■	■	■	■	■	25.00	30	Prescribed	54.16
Elective	2½	16.67				■	■	■	■	■	■	75.00	90	Elective	45.84
Total	15	100.										100.	120	Total	100.

## WASHINGTON AND LEE UNIVERSITY

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Percent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject	Percent of Time in 8 Years	
Mathematics	2½	16.66										4.76	6	Hygiene	2.38	
History	1	6.66										4.76	6	Mathematics	10.71	
Languages	2	13.33										23.81	30	Languages	18.57	
English	3	20.00										4.76	6	English	12.38	
Prescribed	8½	56.66										38.09	48	Prescribed	47.37	
Elective	6½	43.34										61.91	78	Elective	52.63	
Total	15	100.										100.	126	Total	100.	

## WELLESLEY COLLEGE

BACHELOR OF ARTS																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time		80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Percent of Time in 8 Years
													5.08	6	Bible	2.54
													3.38	4	Hygiene	1.69
													5.08	6	Philosophy	2.54
													5.08	6	Science	2.54
Mathematics	3	20.00											5.08	6	Mathematics	12.54
History	1	6.66														3.33
Latin	4	26.66														13.33
English	3	20.00											5.08	6	English	12.54
Prescribed	11	73.33											28.79	34	Prescribed	51.06
Elective	4	26.67											71.21	84	Elective	48.94
Total	15	100.											100.	118	Total	100.

## WELLS COLLEGE

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years		
Subject	Units	Per Cent of Time	80	60	40	20	0	20	40	60	80	Per Cent of Time	Sem. Mts.	Subject	Per Cent of Time in 8 Years	
												3.47	4	Bible	1.73	
												.87	1	Vocal Ex	.44	
												.87	1	Hygiene	.44	
												5.21	6	Philosophy	2.60	
												10.42	12	Science	5.21	
Mathematics	2½	17.22										5.22	6	Mathematics	11.22	
History	1	6.90										5.22	6	History	6.06	
Languages	6	41.40										10.42	12	Languages	25.91	
English	3	20.70										8.69	10	English	14.69	
Prescribed	12½	86.20										50.40	58	Prescribed	68.30	
Elective	2	13.80										49.60	57	Elective	31.70	
Total	14½	100.										100.	115	Total	100.	

## WESLEYAN UNIVERSITY

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements										Percent of Time in 6 Years	
Subject	Units	Per Cent of Time		80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts.	Subject			
													1.66	2	Rhetoricals	.83		
													1.66	2	Hygiene	.83		
Mathematics	2½	17.22														8.61		
History	1	6.90														3.45		
Languages	3	20.70											5.00	6	Languages	12.85		
English	3	20.70											5.00	6	English	12.85		
Prescribed	9½	65.53											13.33	16	Prescribed	39.43		
Elective	5	34.46											86.67	104	Elective	60.57		
Total	14½	100.											100.	120	Total	100.		

## BACHELOR OF SCIENCE

												1.66	2	Rhetoricals	.83
												1.66	2	Hygiene	.83
Mathematics	2½	17.22										5.00	6	Mathematics	11.11
History	1	6.90													3.45
Languages	2	13.80										20.00	24	Languages	16.90
English	3	20.70										5.00	6	English	12.85
Prescribed	8½	58.64										33.33	40	Prescribed	45.98
Elective	6	41.35										66.67	80	Elective	54.02
Total	14½	100.										100.	120	Total	100.

## WESTERN RESERVE UNIVERSITY (ADELBERT COLLEGE)

## BACHELOR OF ARTS

Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years	
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Mts	Subject	Per Cent of Time in 8 Years
													12	Physical Tr.	
												1.64	2	Bible	.82
Mathematics	3	20.00										4.91	6	Mathematics	12.45
Languages	4	26.66													13.33
English	3	20.00										4.91	6	English	12.45
Prescribed	10	66.66										11.46	14	Prescribed	39.06
Elective	5	33.34										88.54	108	Elective	60.94
Total	15	100.										100.	122	Total	100.



## WILLIAMS COLLEGE

BACHELOR OF ARTS																
Entrance Requirements								Graduation Requirements								Percent of Time in 8 Years
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Percent of Time in 8 Years	
Mathematics	2½	17.23										6.45	8	Mathematics	11.84	
History	1	6.91													3.45	
Languages	7	48.24										16.12	20	Languages	32.18	
English	3	20.70										3.22	4	English	11.96	
Prescribed	13½	93.08										25.79	32	Prescribed	59.44	
Elective	1	6.91										74.21	92	Elective	40.56	
Total	14½	100.										100.	124	Total	100.	

## YALE UNIVERSITY

BACHELOR OF ARTS																
Entrance Requirements							Graduation Requirements							Per Cent of Time in 8 Years		
Subject	Units	Percent of Time	80	60	40	20	0	20	40	60	80	Percent of Time	Sem. Hrs.	Subject	Per Cent of Time in 8 Years	
Mathematics	3	17.64										5.00	6	Science	2.50	
Languages	7	41.16										10.00	12	Languages	25.58	
English	3	17.64												English	8.82	
Prescribed	13	76.44										15.00	18	Prescribed	45.72	
Elective	4	23.56										85.00	102	Elective	54.28	
Total	17	100.										100.	120	Total	100.	



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